DOCUMENT RESUME

ED 320 869 SP 032 385

AUTHOR Stinson, William J., Ed.
TITLE Moving and Learning for the Young Child. Presentations from the Early Childhood Conference "Forging the Linkage between Moving and Learning for Preschool Children" (Washington, D.C., December 1-4, 1988).
INSTITUTION American Alliance for Health, Physical Education, Recreation and Dance, Reston, VA.
SPONS AGENCY American Alliance for Health, Physical Education, Recreation and Dance, Reston, VA. National Dance Association.; Council on Physical Education for Children.
REPORT NO ISBN-0-88314-449-2
PUB DATE Dec 88
NOTE 270p.
AVAILABLE FROM COPEC/NASPE, American Alliance for Health, Physical Education, Recreation and Dance, 1900 Association Drive, Reston, VA 22091.
PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Child Development; Dance; Early Childhood Education; *Health Promotion; Integrated Curriculum; *Movement Education; *Physical Education; *Physical Fitness; Play; Student Centered Curriculum

ABSTRACT

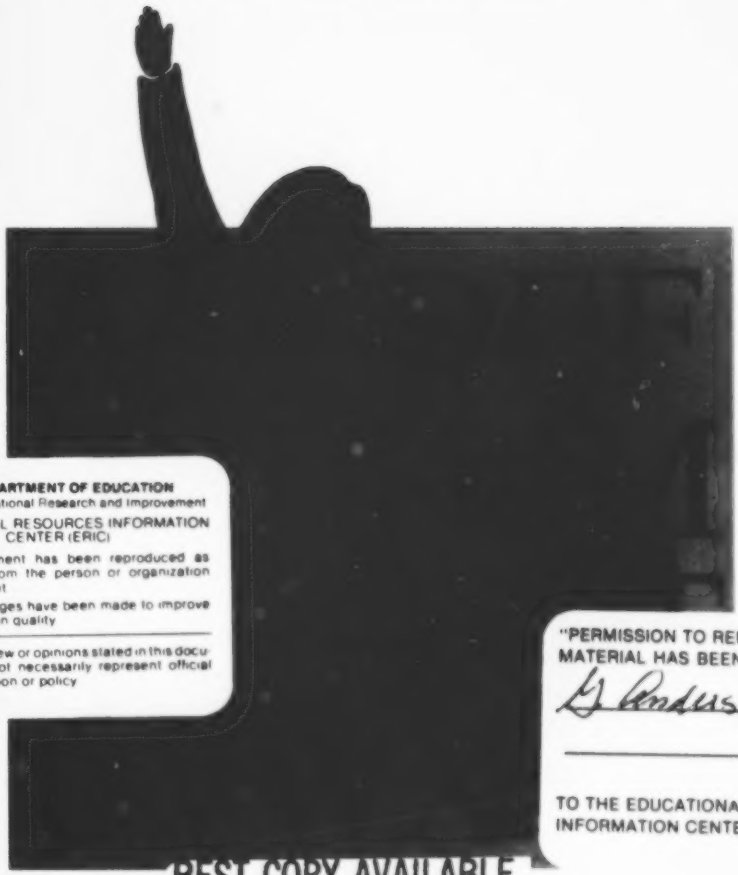
These papers focus on four themes: (1) young children: active learners; (2) physical education: the forgotten aspect of early childhood education; (3) dance: bringing movement as art into the early childhood curriculum; and (4) the child as an energetic, moving learner. Common threads of emphasis were woven through the content of the presentations: movement is learning for all children; movement is both an end in itself and a means to an end; the child is central to the learning process; movement and learning are for all children; and education for young children is an integrated curriculum. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Moving and Learning for the Young Child

William J. Stinson, Ed.

ED320869



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G Anderson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

SP 029 820

Presentations from the Early Childhood Conference, "Forging the Linkage Between Moving and Learning for Preschool Children," Washington, DC, December 1-4, 1988.

Moving and Learning for the Young Child

Edited by William J. Stinson
Emporia State University

Presentations from the Early Childhood Conference,
"Forging the Linkage Between Moving and Learning for
Preschool Children," Washington, D.C.,
December 1-4, 1988.

© 1990
American Alliance for Health, Physical Education,
Recreation, and Dance
1900 Association Drive, Reston, VA 22091
ISBN 0-88314-449-2

Purposes of the American Alliance for Health, Physical Education, Recreation, and Dance

The American Alliance is an educational organization, structured for the purposes of supporting, encouraging, and providing assistance to member groups and their personnel throughout the nation as they seek to initiate, develop, and conduct programs in health, leisure, and movement-related activities for the enrichment of human life.

Alliance objectives include:

1. Professional growth and development—to support, encourage, and provide guidance in the development and conduct of programs in health, leisure, and movement-related activities which are based on the needs, interests, and inherent capacities of the individual in today's society.

2. Communication—to facilitate public and professional understanding and appreciation of the importance and value of health, leisure, and movement-related activities as they contribute toward human well-being.

3. Research—to encourage and facilitate research which will enrich the depth and scope of health, leisure, and movement-related activities; and to disseminate the findings to the profession and other interested and concerned publics.

4. Standards and guidelines—to further the continuous development and evaluation of standards within the profession for personnel and programs in health, leisure, and movement-related activities.

5. Public affairs—to coordinate and administer a planned program of professional, public, and governmental relations that will improve education in areas of health, leisure, and movement-related activities.

6. To conduct such other activities as shall be approved by the Board of Governors and the Alliance Assembly, provided that the Alliance shall not engage in any activity which would be inconsistent with the status of an educational and charitable organization as defined in Section 501(c)(3) of the Internal Revenue Code of 1954 or any successor provision thereto, and none of the said purposes shall at any time be deemed or construed to be purposes other than the public benefit purposes and objectives consistent with such educational and charitable status.

Bylaws, Article III

DEDICATED TO

Margie Hanson for a lifetime of service to children and in appreciation for her contributions to children's education through movement and dance.

Preface

Very few accomplishments are the results of one person's efforts. More often they are completed because one person has a dream and dares to speak of that dream with others. In the interaction one learns that others share the dream and are willing to put ideas into actions to make the dream a reality. Thus, the early childhood conference, "Forging the Linkage Between Moving and Learning for Preschool Children," was a dream brought to fruition by the combined efforts of persons in the related disciplines of early childhood education, physical education, and dance. These professionals shared a common belief in the education of young children through movement and dance, a belief in the linkage between learning to move and moving to learn, and a belief in the interrelatedness of all learning.

With these shared beliefs, four areas of focus emerged for the conference:

- Young Children: Active Learners
- Physical Education: The Forgotten Aspect of Early Childhood Education
- Dance: Bringing Movement as Art into the Early Childhood Curriculum
- The Child as an Energetic, Moving Learner

From the initial discussions of the planning committee to the last minute review for presenters and keynote speakers, common threads of emphasis were woven through the content. The interwoven threads included:

- movement is learning for all children;
- movement is both an end in itself and a means to an end;
- the child is central to the learning process;
- movement and learning are for all children; all children are capable of learning;
- education for young children is an integrated curriculum.

Moving and Learning for the Young Child is a collection of the presentations given at the early childhood conference, "Forging the Linkage Between Moving and Learning for Preschool Children," which was held in Washington, D.C. December 1-4, 1988. For persons who attended the conference this collection will serve as a reminder of what was, hopefully, a most significant professional involvement, and its

reading will rekindle the belief in the importance of movement and learning for young children. For those unable to attend the conference, the text will be food for thought relative to the education of young children. It is hoped that its reading will spark a desire to form linkages with other professionals to provide better education for all children. Working together we can make a difference in the lives of young children and thus, for them, a better future and a better world.

Acknowledgements

Deepest appreciation is extended to the members of the planning committee for their hours and months of dreaming, sharing, and daring. Special thanks to Dollie Wolverton and Mary Lewis of the Head Start Bureau for keeping "the child" as the central focus of discussions and to Barbara Willer of the National Association for the Education of Young Children (NAEYC) for her ability to bring order out of chaos; to Carolyn Tate and Hooshang Bagheri for ideas that stimulated thought and fresh approaches to viewing our mission. Thanks to David Gallahue, assistant conference director, for his attention to detail and his ability to synthesize, and to Margie Hanson for her ideas, for her love, and for always being there when needed.

The conference would have remained only a dream, and the planning committee only dreamers, without the work of committee persons who translated into action, the plans for the conference. Thanks is extended to all committee members and persons from the Alliance staff, with special thanks to Ray Stinar and Mary Blann, for hours of work prior to and throughout the conference; thanks for going the extra mile, always with a smile. Finally, thanks to all presenters, without whom neither the conference nor this publication would be possible. A professional dream became a reality thanks to all of you.

Shirley Ann Holt/Hale
Conference Director

Table of Contents

Preface, vii
ShirleyAnn Holt/Hale

Mission Statement, 1

Introduction, 3
Bill Stinson

SECTION I THE YOUNG CHILD
Yesterday, Today, and Tomorrow, 5

CHAPTER 1 Dualities and Children and Families, 7
Carol Seefeldt

CHAPTER 2 The Linkage Between Movement and Learning, 17
Maida Riggs

SECTION II THE YOUNG CHILD
An Active Learner, 21

CHAPTER 3 Young Children and Learning, 23
Jenni Klein

CHAPTER 4 Baby Moves: Relation to Learning, 31
Alice Sterling Honig

CHAPTER 5 The Importance of Play, 43
Cosby S. Rogers

CHAPTER 6 Can We Help Children Move and Think Critically?, 51
Craig A. Buschner

CHAPTER 7 Movement Education and the Development of Children's Decision-Making Abilities, 67
Elizabeth S. Bressan

CHAPTER 8 How Many Ways Can I . . . ? Problem Solving Through Movement, 73
Fran Cleland

CHAPTER 9 The Development of Self-Esteem in Children, 77
Ambrose E. Brazelton

SECTION III Becoming Physically Educated, 83

CHAPTER 10 Motor Development and Physical Education for Young Children, 85
Lolas E. Halverson

CHAPTER 11 A Dynamical Systems Approach to Motor Development: Applying New Theory to Practice, 105
Jill Whitall

CHAPTER 12 Observing and Facilitating Skill Sequencing, 107
V. Gregory Payne

CHAPTER 13 Developmentally Appropriate Movement Activities for Young Children, 117
Andrea Boucher

CHAPTER 14 Physical Fitness for Young Children, 127
Lee Allsbrook

CHAPTER 15 Children With Special Needs: Mainstreaming and Movement , 135
Eleanore Grater Lewis

SECTION IV In the Art of Dance, 137

CHAPTER 16 Dance and the Developing Child, 139
Susan W. Stinson

CHAPTER 17 Tapping the Internal Rhythm of Young Children, 151
Mark L. Harvey

CHAPTER 18 Linking the Visual Arts with Drama, Movement, and Dance for the Young Child, 159
Bette Fauth

CHAPTER 19 Dance as a Multicultural Education for Young Children, 189
Hooshang Bagheri

SECTION V Internationally Speaking, 201

CHAPTER 20 The States of Early Childhood Education in Canada, 203
Bill McLeod

CHAPTER 21 On Movement Education for Preschool Children in Denmark, 207
Lise Ahlmann
CHAPTER 22 Early Childhood Movement Work in England, 211
Marjorie Sutcliffe
CHAPTER 23 Early Childhood Education in Iceland, 215
Jonina Tryggradottir

SECTION VI Enlightening the Educational Process, 217

CHAPTER 24 Information on the Assessment of Children's Play Structures: An Administrator's View, 219
Lawrence D. Bruya
CHAPTER 25 Playground Design Checklist for Play Structures, 225
Donna Thompson
CHAPTER 26 Panel Discussion Highlights, 229

SECTION VII Our Challenge, 231

CHAPTER 27 Moving and Learning: Linkages that Last, 233
David L. Gallahue

APPENDICES:

APPENDIX A Conference Program, 241
APPENDIX B Research Poster Presentations, 249
APPENDIX C Program Displays, 251
APPENDIX D Biographies of Presenters, 255
APPENDIX E Movement Programs for Young Children: A Position Paper, 265

Early Childhood Planning Conference "Forging the Linkage Between Moving and Learning for Preschool Children"

Mission Statement

Preschool and kindergarten children come to us as totally integrated beings. They are equipped as thinking, feeling, acting, and reacting entities, fully capable of expressing themselves through a variety of modalities. Central to this integrated unity and essential as an expressive modality is the medium of movement. Children differ in the range of their abilities, strengths, and needs, but movement is central to the very existence of all. Educators assist children in becoming skillful movers and in experiencing movement as a total learning process. Play and playful behavior are primary vehicles by which young children learn to move with greater control, joy, and efficiency, and learn through movement with greater clarity, sensitivity, and expressiveness.

The mission of this conference is to affirm young children as active, energetic movers, and to recognize that movement is a common thread through which the education of the total child may be fostered. More specifically, the goals of this conference are to:

- stress the importance of children becoming skilled movers
- focus on movement as a primary vehicle for children's learning
- enhance communication between early childhood and movement professionals
- highlight up-to-date curricular content, resources, and opportunities for collaborative efforts

The objectives of the conference are to help young children:

1. Grow through developmentally appropriate movement experiences as integrated, cognitive, affective, and moving beings;

2. Express themselves creatively through movement as expressive, aesthetic beings;

3. Enhance their ability to communicate as responsible individuals in an atmosphere of cooperation, love, trust, and mutual respect;

4. Foster interpersonal relationships congruent with a set of values and moral principles common to a democratic society.

In a world where societal pressures often impede the optimal development and education of young children, and where the young child is frequently fragmented, it is difficult to deal with the total child and children as children. Together we can make a difference. Together we can focus on children — our best hope for the future.

Introduction

Movement patterns and motor activities play critical roles in the performance of even the most routine tasks of our daily lives. Early childhood experiences provide the foundation for those skills. Movement is integrated into the daily life of every young child as evidenced by the following play and classroom activities witnessed by a group of preschool teachers at their care centers:

Movement Activity During Play		*Movement Activity In the Classroom*
walking	stretching	dressing, tying shoes
running	kicking	climbing stairs
jumping	pushing	opening and closing doors
skipping	pulling	cutting with scissors
climbing	pedaling	coloring with paints
hopping	crawling	drinking from water fountains
throwing	rolling	talking
catching	standing	singing
hanging	sitting	grooming (brushing, washing)
bending	hugging	opening and closing books
		handwriting
		manipulating objects
		standing in line
		walking to activities
		turning lights on
		carrying trays, toys, chairs

It is evident that psychomotor, cognitive, and affective learning domains are influenced through an active learning environment. Play and quality movement experience, provided through structured and unstructured activities, foster an active learning environment, a joy for moving, and a feeling of confidence in the young child's life.

Play is a significant part of early childhood and is the primary vehicle for learning. Play is an all-encompassing developmental process. Through positive play experiences, children learn about

themselves and the world around them. Children become physically strong, mentally alert, emotionally secure, and socially aware. Our current lifestyles, however, often dictate the opportunities for play and the levels of activity available. Lack of space, other children, and parental involvement can hamper the development of young children. Therefore, it is important that teachers and parents be concerned about providing a stimulating, active environment for their children.

Understanding the growth and motor development of young children forms the basis for quality structured movement experiences. Movement activities must be broken down to their simplest developmental level to accommodate the population on hand. Teachers must have a thorough understanding of how the normal child develops in order to effectively plan, organize, and present movement experiences to young children.

Maturation and experience levels are factors in the learning of new and more complex motor skills. Children's readiness for learning a motor skill is determined not only by physical maturation but also by prior learning, cognitive functioning, and motivational and attitudinal feelings concerning the task at hand. These elements may either challenge or stifle the desire or ability to be more physically active. If children are not encouraged to move through appropriately planned movement experiences and to experience the joy of moving, then the physical, cognitive, and social outcomes of movement will be diminished.

The rhythmical nature of young children makes dance a logical medium for learning. Dance has the appeal and creativeness necessary to evoke the joy of movement. As a multisensory experience, it allows children to learn through listening, touching, seeing, and moving. Its problem solving potential for exploratory learning and skill development is not limited to psychomotor but includes cognitive and affective enhancement as well. Thus, dance is very much a vehicle for learning by young children.

The total child should be the vision of all teachers, parents, and caregivers. It is evident that the self-esteem, growth and development, and cognitive enhancement of young children are intertwined in the process of learning to move and moving to learn. Our goal for all children might be summed up in the hope that they will have the courage to try, the thirst to learn, the ability to share, and a genuine concern for others. Forging the linkage between moving and learning for preschool children is our endeavor in achieving these goals.

Bill Stinson
Editor

Section I

THE YOUNG CHILD Yesterday, Today, and Tomorrow

Chapter 1. Dualities and Children and Families
Carol Seefeldt
University of Maryland

Chapter 2. The Linkage Between Movement and Learning
Maida Riggs
Professor Emeritus
University of Massachusetts

Carol Seefeldt's, "Dualities and Children and Families," creates an awareness of where we have been in our concern for young children's needs, our current posture on early education, and what the future holds. All our resources and capabilities must be used to insure a nurturing and enlightening environment for all young children. In "The Linkage Between Movement and Learning," Maida Riggs contends that movement is a constant in every young child's learning experiences and cannot be underestimated in its impact upon the child's total development.

Chapter 1

Dualities and Children and Families

Carol Seefeldt

It was the best of times.
It was the age of wisdom.
It was the season of light.
It was the spring of hope.

It was the worst of times.
It was the age of foolishness.
It was the season of darkness.

The Tale of Two Cities

The dualities in these most familiar words opening *The Tale of Two Cities* continue to intrigue and apply to today's children and their families. For these truly are the best of times. Especially the summer times.

Summertimes are best because today there is no polio. Until the mid 1950s, summertimes were the worst of times. As the number of polio victims climbed daily, children and their families retreated into the presumed safety of darkened homes — homes smelling of pine soap and Fels Naptha, as if the strength of soap alone could ward off the polio germs.

The swimming pools closed first. Surely the warm water and so many children were responsible for the spread of polio. Next the movie theatres closed. Any public place was suspect — and yet the numbers of people contracting polio continued to rise.

Pictures of children in iron lungs on the front pages of the newspapers kept each family aware of potential danger. One terrible summer, when the number of victims seemed to double each day, even the libraries closed. Might not polio germs live on books and be transmitted from child to child as each handled the same borrowed book?

These surely are the best of times — each summer seems like a miracle of freedom from disease.

That is, unless you happen to be poor. Then these are again the worst of times. Between 1980 and 1985, The Children's Defense Fund reported that the percentage of American children ages 1-4 who had not received the polio vaccine climbed from 2.5 to 3.6%. Among nonwhite children, this figure nearly doubled, from 5.4 to 9.7%, and 25% were not fully immunized. The proportion of younger children, those under age 1, not fully immunized against polio was 20.4% in 1985. Among nonwhite infants, a staggering 41.5% were not adequately immunized, up from 26.8% in 1980 (A Childrens Defense Budget, 1988, p. 67).

Clearly though, these are still the best of times for most people to be born. The advances in prenatal and neonatal care make giving birth a safe and happy experience. This wasn't always so. In the past, birth so often was followed by death that children were not even given a name until they had at least survived their first year (Aries, 1962).

So common was the death of an infant or young child that funeral photographs were customary. In order to record the brief life of the young, families had the dead child photographed. Recently historians uncovered a cache of funeral photographs taken in Wisconsin during the last half of the 19th century. The photos depict families gathered on the porches of their farmhouses, with the mother holding the tiny casket containing the dead infant. In other photos, the dead toddler, often dressed as an angel, is held in the mother's arms or draped on a chaise lounge holding flowers, perhaps with a crown of flowers around the head or, in one case, tiny paper wings attached to the child's shoulders. The fact that we no longer have a need for the custom of hiring a photographer to record the brief lives of dead infants and children supports the idea that these are truly the best of times.

If you happen to be poor in our nation, then these are not the best of times to be born. In 1985, after several years of slowing progress in reducing the infant mortality rate, the decline ground to a halt. The 1985 infant mortality rate among babies of all races was 10.6 deaths per 1,000 live births, and 12.1 deaths per 1,000 live black births. In 1985, the United States placed ninth in the world in infant mortality, behind less affluent countries such as Finland, Spain, and Singapore. Even when only white infant mortality in the United States was compared with other nations' overall rates, the United States ranked only 14th, behind Hong Kong and Japan. When the black infant mortality rate in the United States was considered separately, it was 28th worldwide, worse than the overall infant mortality rates of Cuba and Bulgaria, and equal

to those of Poland and Costa Rica (A Children's Defense Fund Budget, 1988, p. 63).

An Age of Wisdom

This is an age of wisdom. We are wise and knowledgeable. More books on child growth and development are published daily than at any other time in the history of the world. Daily, research findings guide us as we make decisions about how we raise, educate, and care for our children.

These research findings give support to our traditional beliefs. Nearly a century ago the pioneers in our field wrote of the power of early environment. Patty Smith Hill knew that an enriched environment during early childhood was necessary. She wrote that the environment must "provide for health of body and the refinements of beauty, saturated with all those human values which make for morality, and mental, and emotional health" (Biber, 1919, p. v).

In the early 1900s, the McMillan sisters documented the power of the early environment to change lives through the nursery school. The McMillan sisters named their school carefully. They selected the word "nursery" to symbolize the nurture, care, and love young children would find, and the word "school" to symbolize the fact that education would be equally emphasized. Rachel and Margaret McMillan were certain that the nursery school could positively affect children, their families, and all of society. They wrote that "all the world is awakening to the fact that human destiny is largely shaped by the nurture or neglect of early infancy and childhood" (McMillan, 1919, p. v).

With the clear certainty of any number of hard, unyielding statistics, we now have abundant, cold data to buttress the beliefs of Patty Smith Hill and the McMillan sisters, as well as those of other pioneers in early childhood education, Barbara Biber, Lucy Sprague Mitchell, Susan Blow. We now know that early educational experiences do influence all of later life.

The data are clear. Early educational experiences are beneficial for children, families, and all of society. *The Persistence of Preschool Effects* (Lazar, 1977), *Lasting Effects After Preschool* (Lazar & Darlington, 1978), and the "Consequences of Three Preschool Curriculum Models Through Age 15" (Schweinhart, Weikart, & Larner, 1986) leave no doubt about the lasting benefits of early educational experiences.

An Age of Foolishness

We are wise! Except when we are foolish. Even though we know the power of early education to affect children's lives, we deny these experiences to many. Today, Head Start, a most successful early childhood education program, reaches fewer than 16% of all eligible children, and Chapter programs, programs that bring additional help in instruction of disadvantaged children, programs that have documented overwhelming successes, are available for less than half of all eligible children (The Children's Defense Fund Budget, 1988).

The McMillan sisters were right when they concluded their book on the nursery school published in 1919 with the statement, "the importance of early influences of the educational environment has been appreciated by people of rare insight in all ages, but society at large even today, is singularly blind or indifferent to the practical outcomes of such facts" (McMillan, 1919, p. vi).

Then too, people use research findings foolishly. Because research indicates that early education increases the achievement of disadvantaged children, some think these findings mean that if you increase or intensify the educational experiences, you can double the benefits for middle class children as well as for disadvantaged children. The theory is do it harder, do it more, do it faster, and there will be twice the savings for children, families, and society.

This may be a partial explanation for the current push for accelerated and academic curricula in preschools. Intent on increasing children's academic achievement and raising scores on standardized tests, the once cognitive, rich early childhood curriculum has been replaced with sterile mastery of isolated skills (Hatch & Freeman, 1988). Rather than children learning concepts, achieving mastery over self and their world, today's young children are being given a sterile curriculum revolving around learning to recognize, read, and write letters and numerals, and to make letter-sound correspondence.

Knowledge of the ABCs, rather than mastery of knowledge, is the curriculum. It is reminiscent of curriculum in the first schools in our nation. In 1600 the ABCs first became the curriculum. In 1647, the early colonists passed the Old Satan Deluder Act, mandating public education for each child in the colonies. Public education was deemed necessary in order to teach children to read the Bible and thus be able to delude Old Satan. The curriculum, rote recitation of the ABCs with the Horn Book as a guide, which would lead children to salvation, was mandated as well (Zais, 1976).

The need for children to reach salvation through mastery of the ABCs was still present in our nation in the early 1900s. As the Froebelian kindergarten, with its gifts and occupations, become more and more popular, Milton Bradley began the manufacture of the gifts — cubes, balls, and games. In order to make children's play with blocks more congruent with the values of society, Milton Bradley placed the ABCs on the surfaces of them. Thus with the ABCs present, children's play with blocks would have some redeeming value.

Once again as we near the end of the 20th century and prepare for life in the 21st century, mastery of the ABCs is viewed by many as the means to salvation — or at least higher scores on some achievement tests. So valued is knowledge of the ABCs that their mastery by young children today once again has taken on spiritual overtones.

This may be an age of wisdom, but it is conservative wisdom. In times of overwhelming change, people become conservative. Wanting to conserve or preserve the way things were or the way one wishes they once were, societies become conservative — cautious and moderate, even frightened. With rapid change people are not sure of themselves, or of their abilities to cope in an increasingly unfamiliar world, and they try to protect themselves and their children from an unknown, uncertain future.

Kate is an example. She is just one of the many children with parents who diligently try to protect and prepare her for an unknown future. Kate's parents waited to have her until they were in their mid-30s. Her mother said she needed to be established in her own career before taking time off to have a child. But once Kate was born, her mother found out she really couldn't hold a high powered, competitive job and care for Kate at the same time. She resigned her position to care for Kate.

Now 3-year-old Kate takes ballet on Mondays, swimming Tuesdays, gymnastics Wednesdays, and Susiki Thursdays. When asked when Kate plays the mother responded, "She has plenty of time to play. We take her to a play group on Tuesday and Thursday mornings, but it's not just a waste of time. They combine play with learning to read."

"I know what I gave up to have Kate," the mother explains, "and I know what a jungle it is out there. Kate is going to make it up to me someday, and she's going to be prepared."

Children are wise. As Piaget said they would, they take inappropriate instruction, assimilate the content into their own existing schema, and make their own sense of it. Most often the result is far from what the adults think they are teaching. A child in an academic preschool was instructed to mark the pictures on her worksheet that began with the letter "d". She marked any number of

the pictures but did not mark the dog. "Listen", the teacher instructed, "dog, da da da. Dog begins with a *d*. Mark the dog." The girl refused, and as she did so she pointed to the nose of the dog, saying, "dog doesn't begin with a da, it begins with the nose."

The push for earlier and earlier achievement of the academics is endemic in our nation. It's not usual to find today's kindergarten curriculum the same as the first grade curriculum of a few decades ago (Shepard & Smith, 1988). A typical kindergarten report card includes evaluation of children's ability to write and read the ABCs, have knowledge of letter-sound correspondence, a place for reading level, and the ability to recognize word families and use a number of word attack skills.

Lorrie Shepard and Mary Lou Smith (1988) document the tragedy of this push for earlier and earlier achievement. Because young children cannot, no matter how much they want to, master isolated academic skills, they fail. Parents, in order to buttress children from failure, keep them out of kindergarten for a year, until they are six and better able to do the work. School systems pass laws requiring that children pass some type of screening test in order to be considered for admittance to kindergarten, or they raise the entrance age so only older, and those better able to achieve first grade work, are admitted. A third solution has been the institution of the transitional, senior or developmental kindergarten year, for those children who fail under the accelerated, academic kindergarten curriculum.

Each of these solutions is foolish. Each costs a great deal of money but more importantly, each costs children their lives. Each constitutes failure for the child and because children perceive themselves as failures, they are more likely to drop out of high school than children who experience the success that comes from appropriate educational experiences (Shepard & Smith, 1988). Rather than conserving, the push for an accelerated, academic preschool curriculum wastes children and money.

A Season of Darkness

There is something dark in our treatment of children, something that cannot be attributed to wanting children to succeed in a competitive world or wanting to conserve a way of life that never was. Leon Sheleff in *Generations Apart* (1982) describes this darkness as adult hostility toward children. He believes that the dominant group, adults, are openly hostile toward the most vulnerable group, young children. Otherwise he argues, why would nearly one fourth of all rental

housing be denied to families with children? Why would wedding invitations read "no children"? Why would churches have nurseries instead of welcoming children in their sanctuaries? And why would we, as a society, be so hostile as to deny poor children the right to basic health care, education, and welfare?

As children become less of an economic necessity and more of an economic burden, not just to the family, but to society, Sheleff says it becomes even more acceptable to discriminate against children.

In a study conducted at the University of Maryland it was found that adults do hold prejudices against children (Seefeldt, 1988). At least on the measure used, adults indicated horror, hostility, and outrage when asked how they felt about being in social situations with children present. The social situations, playing in a park, attending a church social, eating dinner in a nice restaurant, flying nonstop from DC to San Francisco, or having house guests for 2 weeks, ranged from those requiring little contact to close, intimate contact with children. The greater the contact required, the greater the intensity of negative attitudes toward children.

The question is, are we a society so hostile to children, so inconvenienced by them, that we deliberately try to eliminate their childhood? Is our need to hurry children into early academics, ballet, gymnastics, and violin, a result of our distaste and annoyance with children and their childhood? Do we find the childishness of children so annoying that we, as a society, deny them basic health care, education, and the right to be children?

A Season of Light

In order to make sense of their world, John Dewey believed humans created dualities. Dewey claimed that people view the world as a series of overlapping dualities (Greene, 1965). Minds bifurcate human beings into bodies and minds, the universe into the natural and supernatural, theory and practice, work and play. This is one of the best reasons the opening words from *The Tale of Two Cities*, "It was the best of times. It was the worst of times. It was the age of wisdom. It was an age of foolishness. It was the season of light. It was the season of darkness," continue to have meaning and impact throughout time.

But with the uniting of the American Alliance for Health, Physical Education, Recreation, and Dance, the National Association for the Education of Young Children, and the Administration of Children, Youth and Families, there are no dualities where children and families

are concerned. There is only unity of mind and body, work and play, and there is only the season of light.

Mind and Body

There actually is no duality of mind and body. Dewey strove to define the wholeness of humans, and the oneness of the ideal of a democratic education. Piaget (1969) as well, wrote frequently of the wholeness of cognition. "It is widely accepted that cognitive and affective or social development are inseparable, and parallel, just as mental growth is inseparable from physical growth" (p. 117). Dance, movement, physical education, and cognition are the same.

Individually and collectively, these united groups work to ensure that all young children have the opportunity to be whole in mind and body. Faculty at a large elementary school in the heart of a city said, "No. It isn't possible for children to learn through movement or even to play freely out of doors." They described crowded indoor conditions that negated children's opportunities to learn to control bodies and minds as they moved unencumbered through space. When it was pointed out that there were acres of blacktop playyard for moving and playing, the faculty replied, "children can't go outside. Once we tried to build a playyard, and the fence and gate were taken."

Who would supervise children as they run, jump, crawl, and play outside? No one would steal paper cups filled with soapy water and straws for children to blow bubbles in the wind and dance in joy following the bubbles as they float, pop, and burst in the air. No one would steal number lines drawn on the cement of the playyard for children to jump in and through. No one cares to steal any of the games drawn with chalk on the cement. No one takes children's moving freely through space, playing, dancing, finding out what they can do, who they are, when supervised on the playyard.

In this season of light the powerful united associations make sure that all children have the right to be whole in mind and body. Children's dance, their physical activity, is made whole with their learning of words — the bubbles pop, you jumped high, low, fast — with each and every physical experience covered in oral and written language.

Work and Play

Children's play is their work. We are all familiar with this statement. Elkind (1988) wrote how poorly this statement has served us, for some

of children's play is assimilation and therefore play, and other play is accommodation, and therefore work. We no longer need to argue among ourselves over another abstract understanding of the dualities of work and play. The American Alliance for Health, Physical Education, Recreation, and Dance, the National Association for the Education of Young Children, and the Administration for Children, Youth and Families, unite to make certain that this is a season of light in which all children have the right to play whether play is assimilation or accommodation or both.

We only need to make certain that no sharp distinctions between work and play are present in early childhood programs today. Anthropologist Frederick Erickson (1982) contends that teachers who create sharp divisions between work and play use work as the area of their power. This suggests that play, the area in which children are permitted power, is less significant. Anne Hass Dyson (1987) makes the point that children's "off task" behavior, their playful conversational exchanges, their imaginative and fanciful play, is the source of significant learning. This gives one more piece of evidence to support the idea that when classrooms are organized for "work first, play later," scholarship is not served as well as when such distinctions are absent (Fromberg, In Press).

The International Early Childhood Conference documents that this is a season of light and the spring of hope. Daisy, in *The Great Gatsby*, who, "like the traditional hope, may be no more than a memory" (Greene, 1965), expressed the light and hope this conference holds by saying, "tomorrow we will run a little faster, stretch out our arms farther."

The knowledge, interaction, and community gained during the International Early Childhood Conference will enable us to run a little faster and reach out our arms a little higher in order to make certain that tomorrow, children will have only the best of times. Tomorrow, the best will not be twisted to be the worst as we are now doing with the push for earlier and earlier academics. Tomorrow, we will ascertain that all children experience decisions based on wisdom, not foolishness.

Tomorrow, as we run a little faster and reach out our arms a little higher, we will ensure that all children, not just a select few, will have the chance to be born safely, to be nurtured and cared for during childhood, and to taste all the life cycle has to offer. And tomorrow we will succeed.

References

Aries, P. (1962). *Centuries of childhood: A social history of family life*. New York: Vintage Press.

Biber, B. (1919). Foreword. In M. McMillan *The nursery school*. London: J. M. Dent & Sons.

Children's Defense Fund. (1988). *A children's defense fund budget: Fy 1989*. Washington, DC: Children's Defense Fund.

Dyson, A. H. (1987). The value of time off task: Young children's spontaneous talk and deliberate text. *Harvard Educational Review, 57*, 396-420.

Elkind, D. (1988). Play. *Young Children, 43* (5), 2.

Erickson, F. (1982). Cultural organization of participation structures in two classrooms of Indian students. In G. Spindler (Ed.) *Doing the ethnography of schooling*. New York: Holt, Rinehart & Winston.

Fromberg, D. (in press). Play issues in early childhood education. In C. Seefeldt (Ed.) *Continuing issues in early childhood education*. Columbus, Ohio: Charles E. Merrill Publishing Co.

Greene, M. (1965). *The public school and the private vision*. New York: Teachers College Press.

Hatch, J. A., & Freeman, E. B. (1988). Kindergarten philosophies and practice: Perspectives of teachers, principals, and supervisors. *Early Childhood Research Quarterly, 3*, 151-167.

Lazar, I. (1977). *The persistence of preschool effects: A long term follow up of fourteen infant and preschool experiments*. Washington, DC: Administration for Children, Youth & Families.

Lazar, I. & Darlington, R. B. (1978). *Lasting effects after preschool*. Washington, DC: U.S. Department of Health, Education & Welfare.

McMillan, M. (1919). *The nursery school*. London: W. B. Dent & Sons.

Piaget, J. & Inhelder, B. (1969). *The psychology of the child*. New York: Basic Books.

Schweinhart, L. J., Weikart, D. P., & Larner, M. (1986). Consequences of three preschool curriculum models through age 15. *Early Childhood Research Quarterly, 1*, 15-35.

Seefeldt, C. (1988). Adults attitudes toward children. Unpublished manuscript, College Park. University of Maryland.

Sheleff, L. (1982). *Generations apart*. New York: McGraw-Hill.

Shepard, L. & Smith, M. L. (1988). Escalating academic demand in kindergarten: Counterproductive policies. *Elementary School Journal, 89*, 135-147.

Zais, R. S. (1976). *Curriculum: Principles and practices*. New York: Thomas Y. Crowell Company.

Chapter 2

The Linkage Between Movement and Learning

Maida Riggs

Movement is a universal, full-time, personal, childhood occupation, and its importance in children's early learning experiences cannot be overemphasized. Preschool children are busy developing, practicing, and refining physical and intellectual skills to achieve mastery of their bodies and control of and interaction with the environment. Children develop movement in space to understand position, size, distance, and shape. Continuous activity, particularly during toddlerhood and early childhood, is essential for an optimal rather than a marginal level of motor performance.

Movement is purposeful: children learn to *cope* with their bodies to achieve independence, or a sense of competence and autonomy. Feelings about what the body can or cannot do are developed at this time. The three important dimensions of movement are *stability* or balance, *manipulation*, and *locomotion*.

Stability

Most of the very neuromuscular action is reflex in nature and involves coping with gravity. Voluntary control of the body, volitional, complex movement, is possible as the central nervous system takes over and the antigravity muscles become strong enough to support the head, the upper body, and finally, the entire body. The head must be stable in order to see. The body must be stable in order to balance in movement, creeping, sitting, standing, and walking.

Concept: Balance

Description: This three year old boy has carefully placed one foot firmly on the balancing board and is ready to place the other. The important thing for the teacher to observe is his concentration in performing this movement. (Figure 2.1)

Manipulation

Visually directed behavior is dependent upon stability which in turn is dependent upon cortical control. Because young children are not visually oriented, they need information from all other senses, especially *kinesthetic* and *proprioceptive* (muscular), and *tactile* (touch) senses. They need to learn how far to reach to pick up something and this involves learning how long their arms are as well as the distance, size, and shape of the object.

Concept: Space and distance

Description: A very important, and I believe overlooked aspect of visual acuity is that of differentiating an object from its background. The stool itself represents a figure but the child within the stool also is a figure. (Figure 2.2) When mats are the same color as the gym floor, children often stumble over them because they do not represent *figures* but look like *ground*.

Figure 2.1

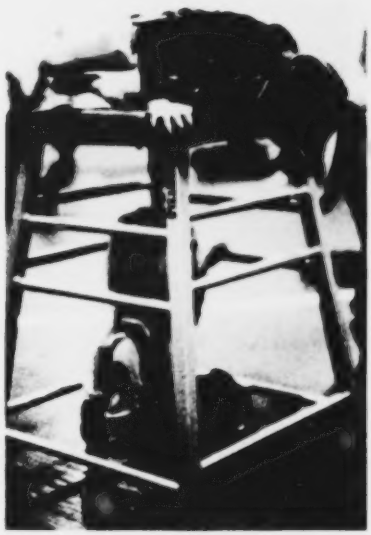


Figure 2.2

Prehension, both physical and mental, involves distinguishing shape, size, texture, color, position of objects, and reacting appropriately.

Serial order: Sensing and responding to first things first.

Tracking: Being able to follow an object, involves perceiving it and then concentrating on its path.

Locomotion

Walking and climbing involve the development of the movement patterns of alternation, (left then right) and opposition (right hand and left foot). Subsequent movements of exploration, adaptation, involve higher forms of cortical control and thinking, but more important perhaps, is the fact that children now become responsible for the results or consequences of their own decisions and actions. The period of the posttoddler is the peak period of exploration.

Climbing and hanging

Having options is most important for it reinforces established patterns and permits the development of new ones. Children are "playing," and most of them can support their own weight easily. They are gaining competence in decision making, posing and solving problems, recognizing and selecting alternatives. Inverted hanging makes demands on the vestibular and visual apparatus to inform the body of head positions and changes of direction. (Figure 2.3)

Figure 2.3

Running

Running makes demands on the nervous system which facilitates its development. Children, particularly those living in apartments, love to run fast and need the freedom of speedy movement.

Concept: Jumping

Description: In the development of the mature jump, the legs and arms are used symmetrically for balance. (Figure 2.4)

Figure 2.4

Section II

THE YOUNG CHILD
An Active Learner

Chapter 3. Young Children and Learning
Jenni Klein
Senior Advisor to President
High Scope Educational Research Foundation

Chapter 4. Baby Moves: Relation To Learning
Alice Sterling Honig, Ph.D.
Professor, College for Human Development
Syracuse University

Chapter 5. The Importance of Play
Cosby S. Rogers
Virginia Polytechnic Institute

Chapter 6. Can We Help Children Move and Think Critically?
Craig A. Buschner
University of California at Chico

Chapter 7. Movement Education and the Development of Children's Decision-Making Abilities
Elizabeth Bressan
University of Oregon

Chapter 8. How Many Ways Can I . . . ? Problem Solving Through Movement
Fran Cleland
Indiana University

Chapter 9. The Development of Self-Esteem in Children
Ambrose Brazelton
Ohio State Department of Education, Retired

Jenni Klein's address, "Young Children and Learning," emphasizes that high quality programs for 3-, 4- and 5-year olds can make a real difference in early education. Quality programs should take into account that children think differently than adults do. Alice Honig relates, in "Baby Moves: Relation to Learning," that effective movement programs for both infants and preschoolers must be based on the developmental processes of the whole child. According to Cosby Rogers', "The Importance of Play," cultural awareness, cognitive training, and actualizing one's potential are critical values derived from a child's play experiences. In response to the question of, "Can We Help Children Move and Think Critically?," Craig Buschner describes the concept of critical thinking, and its integration into early childhood physical education experiences. "Movement Education and the Development of Children's Decision-Making Abilities," by Elizabeth Bressan, discusses structuring children's play experiences with creative movement challenges to enhance their decision-making skills. Fran Cleland, in, "How Many Ways Can I . . .? Problem Solving Through Movement," advocates the child in the learning process through exploratory-discovery movement experiences. In "The Development of Self-Esteem in Children," Ambrose Brazelton stresses that we must convince young children that they are worthwhile and unique human beings.

Chapter 3

Young Children and Learning

Jenni Klein

The world of early education and child care is literally growing by leaps and bounds. While those of us who have been in the field are delighted at this interest in young children, we are also somewhat concerned: What kind of experiences are we providing for young children? What kind of curricula are schools and centers adopting? What will be the effects of early childhood education? Are we using curricula that are suited to 3-, 4-, and 5- year olds, or are we simply bringing elementary curricula down? What goals have we set? What are the children learning? These are important questions we have to ask ourselves. We have to be careful not to over-promise, even though we have the data to suggest that good, sound, early childhood programs can certainly make a difference. We have to make sure that we are clear about what we want to do. We *can* provide high quality programs, keeping the focus on the child.

Unless we implement high quality programs, early education may go down as a failure of the '80s. We will not let that happen. We have to be careful not to exploit early education as a quick fix for all the problems in education in general. For many years, the field of early education/child care was isolated from other fields. Practitioners talked to each other and researchers talked to each other, but not much interaction was occurring with people in related fields. Somehow, this is surprising since the concept of the "whole child" has permeated the literature for many years. In 1970, Dr. Edward Ziegler, the first director of the Office of Child Development in what was then HEW, stated, "If we want children to have satisfying lives as children and to grow into socially competent adults, we will have to retain a vision of the child as a whole, though constantly changing human being." This means we have to remain alert to the fact that anything we do to affect any aspect

of the child will affect him in many other ways. If we lose our balance and concentrate on developing the intellect alone, we may devalue other qualities of individuals that are necessary for a humane community. In all our efforts we must keep the whole child in view.

The time has come for people in various disciplines interested in the growth and development of young children to combine forces, exchange information, and promote sound practices. This conference attests to our willingness to work together to make the field of early education/child care a truly multidisciplinary one.

There is a consensus in the field that high quality, early education can make a real difference. It is important to remember that *good* programs for young children will have a positive impact, not *all* programs. Research and practices have established indicators that make up a high quality program. They are:

- A curriculum based on principles of child-development theory and philosophy;
- A child-staff ratio that allows for individualizing;
- Trained staff and continuing inservice training;
- Supportive supervision of staff (not snoopervision);
- Parents and staff working together as partners;
- Sound evaluation of the program.

An ever increasing number of professional organizations, administrators, and leaders in the field of education are supporting high quality early education. In a new *School Administrator's Guide to Early Childhood Programs*, Larry Schwinehart, of the High School Education Research Foundation, gives advice to school administrators on how to set up good early childhood programs. In the foreword of this publication, Sam G. Sava, executive director of the National Association of Elementary School Principals, states, "The extension of high quality early childhood programs throughout the country offers more potential for educational advancement than do all the recommendations of all the reform reports put together." The National Association of State Boards of Education has issued a report suggesting that early childhood units be established in elementary schools to provide a new pedagogy for working with children ages 4-8, thus providing a focal point of enhanced services to preschool children and their parents. The National Association for the Education of Young Children's publications: *Developmentally Appropriate Practices in Early Childhood Programs Serving Children From Birth Through Age 8, and Accreditation Criteria of the National Academy of Early Childhood Programs*, set standards for the field that are based on sound child development practices and high quality programming. And of course, there are the pioneering *Headstart Performance Standards*, and *The Child Development*

Associate Competencies. It seems clear that the time is right for cooperation and coordination. Let's keep the focus on the child.

Actually, early education has its roots in more than one field. Psychology has taught us that children pass through developmental stages and that there is a sequential process of development. Many programs are now based on the practices developed by Piaget. Also, if we look at the child as an active learner, we are in tune with some of the early giants in our field, such as Frouebel, Montessori, and Dewey. While our field is largely influenced by both developmental psychology and pedagogy, it is interesting to know that much of the current discussion concerns itself with the question: Is there or should there be a difference between early education programs and day care? I hope that you share my belief that wherever young children are in a group setting, no matter who sponsors the program, (public or private school, Headstart, nursery school, or day care), high quality programs should be provided. Betty Caldwell, while president of the National Association for the Education of Young Children, suggested that we resolve the issue by treating the problem as one of nomenclature and calling the field early educare.

I hope that you also share my belief that no matter what type of programs children are enrolled in, good, bad, or indifferent, they will have some impact on the children. What happens in the early years lays the foundation for what is to come later. The early years tend to have an important impact on children's attitudes towards learning, their self-esteem and confidence, their willingness to try new things, pursue a task, not to give up easily, and find new experiences and learning worthwhile and rewarding (or not worthwhile and not rewarding). Preschool children are at a very impressionable age. Everything we do is likely to make an impact — the way we talk, the questions we ask, the way we listen and respond, the encouragement we give or fail to give, the rules we set and let the children set, the expectations we have for them, the physical space, the equipment, the materials we provide, and, of course, the total program we implement.

We have learned a great deal over the last decades, but we do not always use our knowledge. We know there is a developmental sequence that permits the child's understanding to emerge as he or she interacts with the environment. We know that children gain knowledge by interacting directly with the physical and social world. We know that children construct their own knowledge and build upon what they have learned before.

We know that much learning at this age takes place as an integrated whole. Physical, social, and intellectual development are likely to occur during the same activity. Just think for a minute about all the

learning that can go on while children build with blocks, balance on a beam, dress up in the house corner, ride a bike, or paint a picture. In all these activities, children use their senses. They try out new skills, they relate to others, and they are likely to learn new social skills. Their language is likely to expand. Intellectually, they may learn to classify, sort, describe, and seriate by comparisons of sizes, heights, and lengths. Of course, children also strengthen their muscles, increase their agility, and learn to trust their bodies.

Now, what, how, and when do young children learn? It seems important that we remind ourselves that young children tend to learn all the time, not just when we want to teach them. They learn from their families, their friends, their teachers, their surroundings, and the materials and experiences made available to them. Children learn most of the time. Infants learn very early to recognize voices and intonations. They learn to anticipate that somebody will come to take care of their needs, or that their needs probably will not be taken care of. Children learn from people around them and from the ever present television. Children learn about violence, crime, sex, drugs, and so on. Learning proceeds, but obviously not all learning is positive or is what we want children to learn. Many children learn to sit still when they really want to move, and to remain quiet when they really want to talk and communicate. They are frequently bored when they really want to be actively involved. They are likely to lose interest when they have been repeatedly discouraged from asking questions and exploring in their attempt to understand.

One of the issues we have to settle for ourselves is: what do we want children to learn? What do we want for children right now, and for the future? In many ways the decisions that are made are determined by the way *we* see the world, and its future, and by the kind of people we would like the children to become.

According to David Wiekert, preschool programs are especially important for young children because of their stage of development, having moved from sensory motor functions to *properational* thinking. He states: "Physically, they have matured to the point that they have achieved both fine and gross motor coordinations and are able to move about easily and freely. Mentally, they have developed basic language capabilities and can use objects for purposes they themselves choose. Socially, the child is able to move away from familiar adults and social contexts into new settings. What stands out among the basic accomplishments of early education is that the child develops new social, physical, and intellectual abilities.

It is likely that we could all agree on what we want children to learn, and that we want to educate them in a way that will be useful to them,

not only for the present, but also for the future. If we want them to be healthy, active, creative, thinking citizens of a democratic society, who can make intelligent choices and decisions, then we have to have programs that encourage such behavior. We can't just sit them down and talk at them. If we want children to be thinkers, problem solvers, and decision makers, we have to give them opportunities to think, to identify and solve problems, and to make decisions. While some things have to be learned by rote, most learning takes place when young children are actively engaged in play, experimenting and experiencing, and raising their own questions and finding answers.

Learning and problem solving can occur in a large variety of ways and settings — individually, in groups, indoors, or outdoors. The teacher sets the stage by participating and asking questions, always keeping the focus on the child. How do you think we can build that castle? Are there enough blocks? What else could you use? How can we find out? Or, What would happen if?

If we want children to be self-confident, empathetic, and caring, then it behooves us to provide a program that is based on such values. We know from studies that democratic or authoritative teaching and child rearing styles are superior to authoritarian or laissez faire styles. We have to make decisions on what outcomes we would like. However, it is difficult to reach some of our objectives when preschool classes and programs are too large and the child/staff ratio is inadequate. In such cases, even well trained staff have difficulty in providing a good program based on sound child development principles. We know that young children do best in small groups, but what do we do? We also know that the larger the group the teacher is responsible for, the less freedom she is likely to give to young children. The larger the number of children to one adult, the more regimentation is likely to take place.

As you know, research on modeling shows that children learn much of their behavior from watching important adults in their lives. Children learn by watching us, and they quickly pick up our nuances and feelings. They soon learn when we are authentic and when we are putting on an act. Children are quick to pick up the inconsistency between what we say and what we do. In a good early childhood program, teachers should be seen as facilitators of learning, not authoritarians who provide all the answers. Collaboration not competition should be encouraged, and good social behavior should be modeled and supported at all times. When teachers compare young children and initiate or direct competition, they will not facilitate prosocial learning. Instead they will likely discourage some children's involvement and this will not develop what Lillian Katz has termed

"dispositions for further inquiries."

Developing confidence in one's ability to learn, find out, solve problems, practice, act, etc., has broad implications for responsible behavior, from childhood into adulthood. Research on motivation tells us that when children attribute the cause of their behavior to their own efforts, their own competence, and their own selection of goals, intrinsic motivation is likely to be enhanced. This is indicated by children's continuing interest in a task and persistence in solving problems when they arise. On the other hand, use of external rewards, gold stars, or even excessive praise can have the effect of diminishing a child's interest in an activity. Just recently I watched a 5-year old boy, who had a handicap, attempt to reach the top of a climber. He tried and he tried and he tried, day after day after day. He worked very, very hard. Nobody gave him a gold star. Nobody praised him, but somebody said "you really worked very hard." Then, on the third day, guess what? He got to the top. All I could think of was how he must feel. "I did it!" That is what White talks about in his effectence motivation. It is the child who is doing it.

While early education and child care are at a record popularity peak right now, it is important that we provide programs that truly facilitate development of children's physical, social, and intellectual abilities. During this conference, we will hear much about physical development, physical education, movement, and dance. All of these should be part of the early childhood agenda in a developmentally appropriate way, keeping the focus on the child. Young children's active learning includes involvement in a variety of physical activities such as developing both large and fine motor coordinations, increasing physical strength and agility, gaining self-confidence in using one's body, and trying new physical accomplishments. An emphasis on physical development is especially important right now when many children have little access to play areas around their homes or schools, and when many play areas are completely inappropriate for preschool children. Many young children spend hours watching television. Such sedentary activity is not conducive to physical development, and it also prevents active learning. Young children learn very little by being constantly entertained.

There has been an accumulation of research indicating that high quality preschool programs have a positive impact. The best known data comes from the Perry study, the Syracuse study, and 14 projects which made up the Consortium For Longitudinal Studies. Another promising set of data has come from High/scope's Preschool Curriculum Comparison Study. One was a directed instruction method which stressed teacher directed activities. The other two were the

High/scope Curriculum and what was called a traditional nursery school model. The latter two emphasized child-initiated activities. While all three programs produced positive results in the short run, the two programs using child initiated activities had a long time (age 15) positive effect on students' social behavior. This study had a small sample. However, it tends to indicate that when children are given the opportunity to make choices and act autonomously instead of facing teachers who are authoritarians and use rewards and punishments, they develop dispositions for positive social behavior.

In conclusion, let's remember that the world is changing very rapidly. It wasn't so long ago that the first cars were produced, and the horse and buggy became outdated. In my own lifetime, I can remember the first time I saw a television set, an electric calculator, a jumbo jet, and a computer. Each of these innovations brought about major changes in our lives. What kind of changes will the children in our preschools today face as they grow up? While we may speculate, we really don't know what kind of lives the youngsters will be facing. Will there be major innovations? Probably so. Will there be changes in the social structure of our society? Probably so. Will there be new medications to eradicate some diseases, and new viruses to create new health problems? Probably so. How do we prepare children to have the skills and knowledge needed? Obviously we don't have the answers. But, that is our challenge. No matter what changes take place in the world, a sense of competence will certainly stand the children in good stead. Ability to adjust, to cope, to rely on oneself, and on others will likely be useful. The ability to use one's body, to think, to solve problems, to be willing to find alternative solutions, to search for evidence, to deal with new ideas, new knowledge, and new physical surroundings, certainly should prove useful. Resourcefulness and creativity will likely be very important traits. No matter what changes children have to face in the future, a trust in one's body and mind will certainly prove helpful. Let's keep the focus on the child.

Bibliography

1. Berrueta, Clement J. R. (1984). *Changed lives: The effects of the Perry Preschool Program On youth through age 19*. Ypsilauti, MI: The High/scope Press.
2. Bredekamp, S. (1987). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Washington, D.C.: National Association for the Education of Young Children.

3. Bredekamp, S. (1986). *Accreditation criteria and procedures of the National Academy of Early Childhood Programs.* Washington, D.C.
4. Katz, L. G. (1985). *Dispositions in early childhood education.* Urbana, IL: ERIC/EECE Bulletin, ERIC Cleaninghouse.
5. Lazar, I., Darlington, R. (1982). Lasting effects of early education: A report from the Consortium for Longitudinal Studies. *Monograph of the Society for Research in Child Development, 47,* (No. 2-3).
6. National Association of State Boards of Education. (1988). *Right from the Start, The Report of the NASBE Task Force on Early Childhood Education.* Washington, D.C.
7. Schweinhart, L. J., Weikart, D. P., Lauer, M. B. (1986). A Report on the High/scope Preschool Curriculum Comparison Study. *Early Childhood Research Quarterly, ERIC/NAEYC, 1,* 15-45.
8. Schweinhart, L. J. (1988). *A School Administrator's Guide to Early Childhood Programs.* Ypsilauti, MI: The High/scope Press.
9. Weikart, D. (1989 Mar.). Hard Choices in Early Childhood Care and Education: A View to the Future. *Young Children, 44,* (3).

Chapter 4

Baby Moves: Relation to Learning

Alice Sterling Honig

Motor development is one focus in programs to enhance children's learning and experiential pleasures. But motoric development needs to be considered in relation to the *whole* child. We need to see how social, motor, and problem solving development intersect and support growth from infancy through the preschool years.

A focus only on preschoolers neglects the role of the earliest learnings. In infancy, motoric competencies are often the *means* by which developmental milestones and rates of growth in a child's cognitive competencies are measured. For most infancy test items, motoric and cognitive growth are inseparable in the earliest years. Sample items from the Cattell Infant test are: baby follows a toy in a smoother oculomotor, circular motion, bangs two blocks together; hits spoon back and forth inside a cup; stacks cubes; copies a circle; pulls a string to capture a red ring; reaches around a glass barrier to retrieve a bead necklace behind the glass; zooms a toy car back and forth across a table top.

Fine and Gross Motor Development in Infancy

How do motoric competencies that permit assessment of intellective and social skills grow? What are the early sequences of fine and gross motor skills? Infants are wiggly creatures. They respond to stimulation, such as a tickle on the foot, by moving both feet and often arms and mouth as well. As a baby grows, she twists, wriggles, and molds to the contours of a caregiver's body, no matter what the size or shape. By 4 or 5 months, the hand system begins its vigorous and

refined journey toward specialization. From batting at overhead mobiles, swiping and corralling toys with a full hand-raking motion, the hands progress toward scissors grasp and neater and more precise pincer grasps with just forefinger and thumb. Finally by 1 year, a baby can pinch a crumb off a bib (filled with first birthday cake crumbs) with finesse. The pointer finger is vigorous and demanding; showing and pointing are in full sway by about 10 months. The baby can make hands work at the midline to play pat-a-cake and bang two cubes together. Wrist control comes into play after many spills and dribbles so that by one and a half years, the baby can control a cup fairly well for drinking.

By 11-15 months, the motoric system that controls lower trunk and legs begins to mature more. Babies who have been rocking back and forth with tummies lifted high off the floor since about 6 months now grow to locomote. Often they crawl backwards while trying to reach for an alluring toy placed in front of them. From crawling on bellies or scooting, they progress to creeping with tummies high off the floor. Somewhere after the first year, having pulled themselves erect, babies cruise about holding on, and, finally, launch themselves off into space, giddy with the joy of verticality and with the pride of their courageous, wobbly steps, reminding me of a drunken sailor. Tumbles and spills count for little. Over and over the baby practices walking until finally the body can not only walk fairly well, but even run, turn corners without tumbling, and bend down to pick up a toy to carry on the way without a sudden involuntary sit-down. Wide apart legs and arms held out to steady the body characterize the new adventurer in space.

All of these motoric milestones over the infancy period of the first 3 years of life are accompaniments of cognitive growth. They are preludes to spatial explorations and understanding. They are facilitators of grasping, waving, banging, reaching, inverting, righting, sorting, stacking, nesting, plucking in order to learn better about object permanence, causal relationships, gestural imitations, means-end-separations, and may other Piagetian sensorimotor and early preoperational milestones.

The Role of Baby Cuddling for Optimal Motoric Beginnings

The role of the caregiver in infant motoric advances is fundamental to the beginning of motor alertness. Body holding and tender positioning

by the caregiver accommodate baby needs. Thus begin the patterns of easier body rhythms, when a baby can trust that hunger and wetness and discomforts are truly recognized and promptly attended to by the caregiver. Tensions relax as the baby molds to the trust adult's body. Such motoric attunements presage less tension in body gestures and movements later on. The baby given plenty of cuddling and lap holding time feels more emotionally secure. This child can respond motorically in a more relaxed, graceful body fashion. Children who feel uncertain about maternal body loving may act more "maturely" in terms of being able to play on their own, or explore away from the caregiver. But sometimes, children without loving will exhibit a diffuse restless motoric quality. They wander around a nursery and cannot settle into an activity for persistent play. They may act tense and hyperactive, stiffening their bodies defiantly if a teacher reminds them of reasonable rules. They may whirl with clenched fists to defend themselves against perceived threats if another youngster simply brushes past on the way toward an attractive toy. Well-cuddled babies and toddlers may be more motorically at ease in body movements and smoother in their coordinations.

Because they are shoved off breasts and laps too early, some babies may even seem "naughtier." Their increased motoric impulsivity and muscular tension lead them to clumsier behaviors that result in knocking over other children's block constructions, or breaking the family's precious objects more often.

Cross Cultural Studies and Infant Body Holding

In many cultures, mother's responses to the infant at birth help a baby increase muscle tone and assure coordination. Dr. Brazelton (1977) in pediatric work in Lusaka, East Africa, noted that a tribal mother with a depleted uterus gave birth to a baby with yellow peeling skin. Baby was floppy and hypotonic. Yet within days, the mother, who nursed frequently, wrapped her baby firmly in her dashiki and wound the cloth securely to her body. Then she set off to walk back to her village. Visiting nearly 2 weeks later, Brazelton found that these babies had made real motoric advances:

> By ten days these neonates were ahead of our controls in alerting to voice and handling, in social interest and quieting when handled, in regulating motor adjustments, in maintaining alert states, and were demonstrating

an exciting quality of motor responses which we had labelled *directed* (p. 49).

Infants are carried on the mother's or a caregiver's body in many cultures. Mexican families carry baby in a rebozo. Japanese grandmothers market with infants strapped on their backs. In Llasa, the capital of Tibet, babies are snuggled securely by cloths wound onto their parent's back. In China, a parent will often make a cradle of hands behind the back and carry a youngster in piggy-back style on the back.

Thus, across the world, many peoples give the gift of "dominion" over the adult body to the infant and toddler (Honig, 1983). The infant is given the priceless gift of touch, warmth, shifting postures, and security.

In China, I have observed that while older brothers and sisters on a street in Wu Xi were trying to create structures out of rubble in a lot, their toddler siblings were busy cheerfully trying to jump on the older children's backs — the back was a place of pleasure and comfort, and even play. Yet in the United States, we often bring up infants in cribs, swings, and plastic seats. We need to get back to offering more body time to babies.

Floor Freedom for Babies

Ainsworth (1982) has pioneered studies of the development of attachment patterns of infants with their caregivers. Aside from tuned-in responsive caregiving, body availability and generous, prompt response to distress, and tempos in feeding that match infant needs, babies need motoric practicing space.

Floor freedom gives an infant opportunity to practice pushing up off the floor, reaching for toys, venturing into brave explorations, and feeling the edges of her or his body. Kaplan (1978) calls this "putting a rind on the body." Mothers of secure infants provide floor freedom. Ainsworth (1967) observed Ganda infants in Uganda. They crept freely over the bodies of the mothers. Upon reunion, they lifted their arms and crept toward mother in order to be lifted into arms. They vocalized and smiled greetings at a returning mother, and were able to respond more positively to strangers from the security of mother's arms.

In researching the beginnings of secure and insecure emotional attachments, Ainsworth (1982) has noted that mothers of avoidantly attached babies (who may be very demanding of mother at home, but

who avoid greeting her or asking for a reassuring hug in a reunion situation) dislike body contact or affectionate interactions. Resistent-ambivalent babies yearn for body contact in a reunion situation, but push away or strike the parent who does offer a pick up and hug. These mothers are affectionate. However, in general, they are *insensitive* to body signals of their babies. They may pick up and play with an infant at their convenience. They behave intrusively and insensitively with stimulation just when a baby is busy and absorbed playing with toys or batting at a crib mobile. They are inconsistent in discipline and noncontingent in responding to the baby's signals of mood, need, or preference.

Researches by Sroufe (1985) and colleagues have found that insecure infants have later histories of fighting with peers, bullying, or being bullied. When maternal inappropriateness reaches the level of *child abuse*, then researches show that motorically inappropriate aggressive behaviors *typify* responses of toddlers both to peers in a play situation and to adults (Main & George, 1985). Thus, aggressive motoric actions in toddlerhood and in the preschool and school years have been experimentally tied to maternal care that is indifferent, insensitive, and even violent with the child. Child motoric aggressions, if they are not redirected through therapeutic endeavors of caregivers and teachers, can lead to later violence against persons, in assaults.

When early intervention programs for young children include responsive loving caregiving, intellectual stimulation, and motoric skill building in prosocial and positive peer group interactions, then the long term motoric violence that characterizes delinquents may be averted.

In a longitudinal program of high quality day care offered to infants from 6 months to 5 years, Lally, Mangione & Honig (1988) report that infants from low income, teenage high school drop out families, but who attended a high-quality infant/preschool program, grew up to be teenagers who exhibited much less delinquency than control youngsters. Of 65 control adolescents, 4 had been before the courts as juvenile delinquents, and 3 of the 4 were considered undercontrolled. Of the 54 control adolescents, who had not been in a high quality program in their infancy and early years, there were 12 with assaultive records, including armed robbery, rape and burglary, and several offenses on their records. Thus, *use of motoric skills for violence may well be prevented by early enrichment programs for babies and their families.*

Body Language of Caregivers in Child Care

Aspects of child caregiving situations a teacher provides will influence the motoric grace, vigor, and enjoyment young children develop. Caregivers need to ask themselves how "armored" they are. Young children in group care need access to caregiver hugs and laps. Immaculate grooming that gives "off limits" signs to young children can make them feel tense and hungry for body contacts. They may be hit for infractions at home. Negative body contacts are the ones they know and are comfortable with. Some children even try to goad teachers into shaking them or handling them firmly in negative discipline situations because the children miss skin contact and they only know how to "recreate" in the nursery inappropriate body and motoric interactions from their home lives (Wittmer & Honig, 1988).

Caregivers need not worry about heavy dieting. The more body you have, the more kids can get comfortable on you, or lean against you. Kids will like too much of you rather than too little!

Some adults are worried that toddlers who are held too much will tend to be overprotected and unadventurous. That is not true. The great motoric strivings of toddlers lead them to practice walking, running, turning around, carrying toys, and locomoting. Their inner timetables will impel them to set off on their own when they are ready. Inner timetables and deathless curiosity lead them on. Toddlers need to be sure that caregiver bodies are available as "refueling stations." Toddlers need to feel in control of their growing motoric maturity and new steps toward independence both literally and symbolically. *Practicing* these new motor skills is a great joy and determination of toddlers. No one needs to "force" a baby to learn to walk. Babies will get up and practice motoric skills on their own. Lure them; don't force them. Provide wonderful safe environments with sturdy equipment and toys (Curtis, 1982).

Early Rhythmicity and Teacher Interactions

Babies have rhythm. They love to bounce their bottoms to music. They even coo and kick their legs in response to the vocal and verbal rhythms of parents whose voices are caressingly and admiringly directed to them.

A good game for 8 or 9 month olds is to put them in an infant seat and bang gently on a drum. Any poetic or nursery rhyme rhythms will do. Try "Hickory-dickory dock, the mouse ran up the clock," or "Mary had a little lamb." The strong rhythms of nursery rhymes and folk songs will lead babies to bounce in rhythm with songs and poetry.

Dancing with babies in adult arms also helps them learn the pleasure of music and rhythms. Put on waltzes and slow music or slow minor-key melodies on a dark and gloomy winter afternoon and dance around with babies in arms.

Toddlers, of course, love it if you put on easy-to-sing slow ice-skating music (not loud or nervous rock rhythms) and give each toddler a piece of nylon gauze to wave and to twirl as they dance around with their peers.

Body Sensuality and Motoric Relaxation

Young children who are tense have more trouble with graceful coordination of their muscles. Tension and stress are pervasive in the lives of some children even in secure loving families. The demands and time constraints of dual career families can cause them to rush on the way to child care and rush when the child gets home. Allowing children *sensual* expressions give them opportunities to relax tense muscles. Children may need to suck a thumb, stroke a blanket, or masturbate gently under blankets at nap time. Teacher disapproval of children's attempts to provide sensual comforts for their tensions may increase their bodily tensions. Children need freedom to feel *all* of their feelings and to express their body feelings positively through dramatic play games or large muscle games, such as chasing peers or marching around with other kids.

Aggression

Certain outlets for motoric tension *are* unacceptable in the child care setting. How shall teachers handle children's kicking, biting, or hitting? Aggression cannot be accepted. Teachers need to communicate firmly and clearly that hurting others is not allowed. Yet toddlers who need to bite *can* bite on a teether. A teether *is* for biting. People aren't. A child can spit in a toilet. But *not* at a person. Pegboards are for pounding. People aren't. When the adult model is firm and clear, then motoric aggressions can be channelled appropriately. Body movement games and opportunities for muscular discharge are necessary for

young children daily. Think of the screaming and running at recess times in elementary school playyards. Kids need motoric outlets as much as they need to develop *specific* skills in ball games and group games.

Tense Days in Preschools

Aside from organized group games and motor activities for young children, teachers need to take time on days when grumpiness runs high or gloomy weather outdoors keeps children confined inside, to carry out stretches and bends and rolls and tumbles and twists and curls and deep breathing exercises. Even massaging tots' backs can help. For infants, daily body massages as described in Leboyer's beautiful book "Loving Hands" can expand the beauty and full relaxation of limbs that infants feel as they are gently massaged.

Older toddlers and preschoolers love to jump. Safe places need to be provided to crawl, slither, run, climb, and jump. Be sure that *padded* coverings are placed under geodesic domes so that if a brave climbing toddler does slip, the fall will be well cushioned.

Group Games as a Way to Promote Prosocial Development

Americans are a competitive people. Motoric skill building in the early years can enhance or hurt young children's *self-esteem*. Teachers need to beware of using motor games to compare children. Each child should enjoy an activity for its own sake and for the group feeling of moving their bodies in the company of friends. Counting how long one child can hold onto a bar with his or her legs, while upside down, compared to another child, who has weaker muscles and drops quickly to the mat below, will cause jealousies and hurt feelings. Motoric strength and skill building must be subservient to nursery goals of building enjoyable group and personal experiences, building grace and self-confidence.

Caregivers need to brainstorm how to turn certain group games into opportunities for social cooperation — for learning sharing, cooperating, and concern for others rather than competition to feel superior to another child.

One good example is to create variants on familiar games. The game of "musical chairs" can be played so that each time the music stops

and one chair is taken away, the child who is not so quick to scramble for one of the remaining chairs can find a lap of a peer to sit on. Thus, at the end of the musical chairs game, no children are excluded, and everyone is either sitting on a chair or on a playmate's lap! Then, all the children have a *place* to be in that game. They have to be skillful enough to scurry around and look for a place to sit, but the game isn't *excluding* those who are motorically least able. When teachers and parents compare kids unfavorably, that really kills the spirit. You can hate your brother or sister forever if mother or father thought your sibling was the smarter or the *stronger* or more *able* person.

The next thing a prosocial advocate promotes is bravery, courage, and ego strength through developmental practices based on Piagetian equilibration which I call "matchmaking and dancing the developmental ladder" (Honig, 1982). Promote bravery by setting paths for the child that are just a *little* bit hard, a little bit novel, a little bit different, a little bit new. Lure children. Children who feel your positive regard will try harder to catch or throw a ball accurately. They try because they know they will probably be able to succeed. You are not demanding "performance" beyond their capacities. We are not here to coddle kids *or* to have fearful children. Start with easy games and children themselves will gradually choose to move toward greater challenges.

Why are prosocial skills so important? Living in peaceful and supportive ways with each other is difficult for young children (and some grown-ups!) to learn. Preschool motoric curricula can really help. Sports equipment that takes several children to work *together* can give a boost to cooperative sports learning. Help children to experience the pleasure of playing *together* — as when they all bat at balloons that you have blown up and set in motion and the rule is to keep the balloons up in the air as *long* as the children can.

Dr. Ronald Haskins (1985) has observed low income children who graduated from a cognitively-based high-quality program which they had attended fulltime from infancy to school age. Graduates of the Abecedarian project were observed in early elementary school. They kicked, hit, threatened, and acted aggressively 15 times as often as low income control children on the playground, in classrooms, corridors, and in the lunchroom.

Of course, as soon as the project director implemented a prosocial program, "My friends and me," from American Guidance Service, the next wave of graduates did not show significantly more aggression toward peers in elementary school as compared with their controls.

Prosocial motoric activities can be promoted with very young children. Toddlers can each hold two ends of a towel or blanket and

try to keep a large ball bouncing on the blanket by moving their arms in coordinated gestures.

Teachers need to use more than motoric activities to promote the skills of sharing, caring, and helping. Read stories about kind friends to provide daily doses of bibliotherapy. Also use the television program, "Mr. Roger's Neighborhood," which has been shown to increase children's tolerance for turn taking and for patient waiting during peer playground activities after a month of daily viewing (Friedrich & Stein, 1973).

Conclusions

Teachers who are specialists in motoric skill building need to think about how their specialty can help the *whole* child develop better. They need to think developmentally — from back rubs and massages for tiny tots to cooperative games for older children. Competition should not be the main goal. Increasing children's self-esteem, gracefulness, and courage-to-try are important goals of movement education for young children.

References

Ainsworth, M. D. S. (1967). *Infancy in Uganda.* Baltimore, MD: Johns Hopkins Press.

Ainsworth, M. D. S. (1982). Early caregiving and later patterns of attachment. In M. H. Klaus & M. O. Robertson (Eds.), *Birth, interaction, and attachment.* Skillman, NJ: Johnson & Johnson Baby Products.

Brazelton, T. B. (1977). Effects of maternal expectation on early infant behavior. In S. Cohen & T. J. Comiskey (Eds.). *Child development: Contemporary perspectives.* Itasca, IL: Peacock Press.

Curtis, S. R. (1982). *The joy of movement in early childhood.* NY: Teachers College Press, Columbia University.

Friedrich, L. K. & Stein, A. S. (1973). Aggressive and prosocial television programs and the natural behavior of preschool children. *Monographs of the Society for Research in Child Development, 38* (4, Serial No. 151).

Haskins, R. (1985). Public school aggression among children with varying day-care experience. *Child Development, 48,* 806-819.

Honig, A. S. (1982). *Playtime learning games for young children.* Syracuse, NY: Syracuse University Press.

Honig, A. S. (1983). Meeting the needs of infants. *Dimensions, 11* (2), 7.

Kaplan, L. (1978). *Oneness and separateness: From infant to individual.* New York: Simon & Schuster.

Lally, J. R., Mangione, P. I. & Honig, A. S. (1988). The Syracuse University Family Development Research Program: Long-range impact of an early intervention with low-income children and their families. In D. R. Powell (Ed.). *Parent education as early childhood intervention: Emerging direct in theory, research, and practice*, 79-104. Norwood, NJ: Ablex Publishing Corporation.

Main, M., & George, C. (1985). Responses of abused and disadvantaged toddlers to distress in age-mates: A study in a day-care setting. *Developmental Psychology, 21*, 407-412.

Sroufe, L. A. (1985). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competency. In M. Perlmutter (Ed.), *Minnesota symposium on child psychology, 16*, 41-81. Hillsdale, NJ: Erlbaum.

Wittmer, D. S., & Honig, A. S. (1988). Teacher re-creation of negative interactions with toddlers. In A. S. Honig (Ed.). Optimizing early child care and education (Special Issue). *Early Child Development and Care, 33*, 77-78.

Chapter 5

The Importance of Play

Cosby S. Rogers

Play is central to what it means to be alive—to be human. It is both a means and a goal (Rogers & Sawyers, 1988). As a means, the value of play lies in its potential for optimizing the human experience, both individually and collectively. As a goal, it is the essence of actualization—the experience of being all one can be. Vandenberg (1985) stated:

> . . . the importance of play and fantasy are not to be found in their indirect stimulation of cognitive skills and problem-solving. Rather, play and fantasy are central features of what it means to be human, and problem-solving skills are a spin-off of the ability to imagine. (p. 6)

As a means, the value of play lies in it's contribution to development — for individuals and for humankind as a whole. For the individual, it may be the most effective mode for supporting physical, cognitive, social, and emotional development. For humankind, it is a mode in which social, cultural, and technological innovations occur.

Play and Individual Development

Play supports the development of the whole child—physically, cognitively, socially, and emotionally. Levy (1978) wrote that the most significant attribute of play is that it integrates all aspects of human behaviors, i.e., it brings a unity of the mind, body, and spirit. Because children do not separate feeling from thinking, acting, feeling, and socializing, play is the most effective mode in which to learn (Elkind, 1986). When relaxed and in control of the level of challenge, they can and do reach out for the optimal challenge and thereby stretch their

abilities to the next higher level (Rogers & Ponish, 1986). A review of research literature reveals that play supports creative problem solving, social development, and emotional development.

Creative Problem Solving

Kogan (1983) commented that the research on the link between play and creativity may be the most promising research on children's creativity in the last decade. Indeed, substantial evidence for a link between play and creativity has been provided (Dansky, 1980a, 1980b; Dansky & Silverman, 1973, 1975; Pepler & Ross, 1981; Sutton-Smith, 1968). In these studies, one group of children is generally given a set of materials with which to play, while another group is asked to watch and imitate an adult who performs a task with the same materials. After the experiment, children in the play groups have generally excelled on tests of creative thinking. Although play also contributes to physical and psychomotor development, this paper focuses on the psychological research.

Language and Literacy

Children's first attempts to read and write often occur during play, such as when they play school with older siblings. Dramatic play seems to be more beneficial than sensorimotor or constructive play in enhancing reading and writing skills in kindergarten children (Pellegrini, 1980; Pellegrini & Galda, 1982; Saltz, Dixon, & Johnson, 1977; Saltz & Johnson, 1974). Teachers can set up the classroom environment to support literacy by providing numerous opportunities for reading and writing as part of the dramatic play. For example, note pad, pencils/crayons, and books can be used as props for the homemaking area, for grocery stores, and for business offices. Storekeepers often want to label items for sale, and homemakers (male and female) make grocery lists and read to babies.

Social Development

Play contributes to social development in two ways—it enhances social skills (helping, sharing, negotiating) and it promotes social cognition, including the ability to envision another's perspective (Rubin, 1980). In sensorimotor play and in constructive play, children often need to share materials, equipment, and space. When conflicts

between peers arise, it forces them to understand that there is another viewpoint. If adults encourage children to "work it out" without solving the conflict for them, it helps build negotiation skills. Dramatic play may be even more beneficial than sensorimotor or constructive play in enhancing social development. In dramatic play children learn to negotiate roles ("Who will be the baby?"), contexts ("Let's go to the circus." - "No, let's go to the zoo."), and story sequences ("Now you're supposed to kiss the mommy goodbye.").

Research has demonstrated the link between social play and social development. Social competence, popularity, and role-taking were related to social pretend play in a study by Connolly (1980). Perspective taking skills have been shown to be higher among children trained in socio-dramatic and fantasy play (Burns & Brainerd, 1979; Matthews, Beebe & Bopp, 1980, Rosen, 1974; Saltz & Johnson, 1974; Smith & Syddall, 1978). At least two studies have demonstrated greater group cooperation (Rosen, 1974; Smith & Syddall, 1978) among those trained in socio-dramatic and fantasy play. Rubin (1985) found that children who tended to play alone or beside others, instead of with others, performed more poorly on social and interpersonal problem-solving tasks. They were also rejected by their peers. Children who participated frequently in socio-dramatic play were popular and had higher scores on interpersonal and social problem-solving. Children who played games with rules were high on peer popularity, social competence, and social cognition (Rubin, Maioni, & Hornung, 1976).

Emotional Functioning

Play provides a medium for expressing emotions and for developing the means for dealing with those emotions. Indeed, the inability to play has often been used as a symptom of poor mental health. Although little research has investigated the relationship between play and emotional functioning, those few studies that are available indicate that play has a positive role in supporting emotional development. Erik Erikson (cited in Brunner, 1976) conducted a 30-year follow-up study of persons who had participated in his early research. He found that those who were leading fulfilling and interesting lives were the ones who had a sense of playfulness. The value of play for reducing emotional anxiety has been demonstrated repeatedly in the hospital setting (Bolig, 1984; Lindquist, Lind, & Harvey, 1977; Wilson, 1985). According to Piaget (1951/1962) pretense play serves four potential types of emotional expression. At the first

level, *simple combinations*, the child changes reality or creates imaginary characters to suit the child's emotional state. A scene may be enacted but the scary parts may be eliminated or the parts that enhance the ego may be relished and highlighted. In the second type, *compensatory combinations*, children add forbidden acts to the make-believe. They can do in play what parents/teachers forbid in reality—perhaps inventing an imaginary playmate or eating a mountain of ice cream. In type three, *liquidating combinations*, a traumatic event or concern may be acted out repeatedly in order to get control of or reduce the sting of the feelings. Children enact funerals, wars, and emergency rescues, possibly in an effort to master the anxiety associated with those events. Finally, in *anticipatory symbolic combinations* children who are concerned with the desire to disobey and the fear of consequences of disobeying may remove the act of disobedience from the self by letting another character carry out the forbidden act and suffer the consequences—in pretense. Fein (1985) points out the importance of pretense is in allowing the child the freedom to alter one's relationship to the immediate environment and the freedom to denote things which have not actually been experienced.

Play and Humankind

Evaluation

Play is a mode in which evolution of humankind can occur (Bruner, 1976). This includes evolution of human behavior as well as cultural and technological advances. Historically, most creative works of art, music, and literature were produced during times of relative leisure. Many scientific insights have been achieved by persons who were at leisure. For example, Einstein is said to have playfully imagined himself traveling at the speed of light. More recently, the winner of the Nobel Prize for economics had the insight for his new theory while playing with blocks during his son's visit to the pediatrician's office.

Play is important for social evolution. If the imaginative problem solvers who have invented social structures or programs for upgrading the quality of human existence can be called players, then we can include Dag Hammarskjöld, Martin Luther King, and Robert Kennedy among the list of great players. They had dreams and visions and acted on them. Mahatma Gandhi and Martin Luther King used forms of street drama as a method for demonstrating the need for change. The language of fantasy is evident in the following quotes:

> The future does not belong to those who are content with today. . . . Rather, it will belong to those who can blend passion, reason, and courage in a personal commitment to the ideals and great enterprises of American Society.
>
> *Robert Kennedy*

> I have the audacity to believe that peoples everywhere can have three meals a day for their bodies, education and culture for their minds, and dignity, equality, and freedom for their spirits.
>
> *Martin Luther King*

Social change has resulted when devoted politicians have "played games of politics" in order to bring into new existence new social programs or structures. For example, Dag Hammarskjöld's United Nations, Sargent Shriver's Peace Corps, and Lyndon Johnson's War on Poverty exemplify the results of playing around with governmental structures—rearranging the building blocks of government to construct new programs. In 1988, when President Reagan and Soviet Leader Gorbochev established positive communications, the element of play was visible in their interactions.

The quality of life in the human race may depend on play. Several years ago Frank and Theresa Caplan (1973) pointed out that those countries in which the most progress has been made in social and economic conditions were ones in which children were guaranteed the opportunity to play. As a result, UNICEF included among the Declaration of Rights of the Child, "The right to free education and full opportunity for play and recreation."

UNICEF's Declaration of Rights is merely a declaration and carries no legal obligation on the part of national governments to ensure that the right to play is a reality. Recently, the Convention on the Rights of the Child (Castelle, 1988) included the right to rest and leisure. If approved by the General Assembly of the United Nations in November 1989, this right would become international law.

Peace

Play is one route to peace—peaceful family and peer relationships, and global understanding. Some successful parent education programs have included a family homework assignment—play together as a family. Numerous games have been invented to promote group cooperation rather than competition. Dramatic play or role enactment enables children to imagine how children of other nations feel and think. Learning the songs, games, dances, and stories that children of

other nations enjoy enables children to know that their similarities may be greater than their differences. UNICEF has published several books on the foods, songs, and games of children around the world (e.g., Grunfeld, 1975).

Games that enhance cooperation rather than competition are valuable for helping children develop social skills. Publications such as *New Games* (Flugelman, 1976), and *More New Games* (Flugelman, 1981), are valuable resources for practitioners wishing to capitalize on the value of play for enhancing peaceful peer relationships. Another resource is the Sports and Games Cooperative in Ontario, Canada and New Games Foundation in San Francisco.

Summary

Play is an optimal mode for developing the potential of individuals as well as for humankind, taken collectively. For individuals, research demonstrates the value of play for enhancing creative problem-solving, language and literacy, and emotional expression. For the whole of society, play is a mode in which culture evolves via contributions to art, science, music, literature, and peacemaking. Finally the greatest value of play may be the opportunity to experience the play state—to be actualized by reaching out and up with the whole self to be all one can be; to give life to the future.

References

Bolig, R. (1984). Play in hospital. In T. D. Yawkey & A. D. Pellegrini (Eds.), *Child's play: Developmental and applied* (pp. 323-345). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Burns, S. M., & Brainerd, C. J. (1979). Effects of constructive and dramatic play on perspective-taking in very young children. *Developmental Psychology, 15*, 512-521.

Bruner, J. S. (1976). Introduction. In J. S. Bruner, A. Jolly, & K. Sylva (Eds.), *Play—Its role in development and evolution* (pp. 277-285). New York: Basic.

Caplan, F., & Caplan, T. (1973). *The power of play.* Garden City, NY: Anchor Press/Doubleday.

Castelle, K. (1988). *In the child's best interest: A primer on the U.N. convention on the rights of the child.* East Greenwich, RI: Foster Parents Plan International,

Inc. and New York: Defense for Children International-USA.

Connolly, J. (1980). *The relationship between social pretend play and social competence in preschoolers: Correlational and experimental studies.* Unpublished doctoral dissertation, Concordia University.

Dansky, J. L. (1980a). Make-believe: A mediator of the relationship between play and associate fluency. *Child Development, 51,* 576-579.

Dansky, J. L. (1980b). Cognitive consequences of socio-dramatic play and exploration training for economically disadvantaged preschoolers. *Journal of Child Psychology and Psychiatry, 20,* 47-58.

Dansky, J. L., & Silverman, I. W. (1973). Effects of play on associative fluency in preschool-aged children. *Developmental Psychology, 9,* 38-43.

Dansky, J. L., & Silverman, I. W. (1975). Play: A general facilitator of associative fluency. *Developmental Psychology, 11,* 104.

Elkind, D. (1986). Formal education and early childhood education: An essential difference. *Phi Delta Kappan, 67,* 631-636.

Fein, G. G. (1985). The affective psychology of play. In C. C. Brown & A. W. Gottfried (Eds.), *Play interactions: The role of toys and parental involvement in children's development* (pp. 19-28). Skillman, NJ: Johnson & Johnson.

Flugelman, A. (Ed.). (1976). *The new games book.* New York: Dolphin.

Flugelman, A. (1981). *More new games.* New York: Dolphin.

Grunfeld, F. V. (1975). *Fames of the world.* Zurich: Swiss Committee for UNICEF.

Kogan, N. (1983). Stylistic variation in childhood and adolescence: Creativity, metaphor and cognitive styles. In J. H. Flavell & E. Markman (Eds.), P. H. Mussen (Series, Ed.), *Handbook of Child Psychology* (Vol. 3): *Cognitive development* (pp. 630-706). New York: Wiley.

Levy, J. (1978). *Play behavior.* New York: Wiley.

Lindquist, I., Lind, J., & Harvey, D. (1977). Play in hospital. In B. Tizard & D. Harvey (Eds.), *Biology of play* (pp. 160-169). Philadelphia: Lippincott.

Matthews, W. S., Bebbe, S., & Bopp, W. (1980). Spatial perspective-taking and pretend play. *Perceptual and Motor Skills, 51,* 49-50.

Pellegrini, A. D. (1980). The relationship between kindergartner's play and reading, writing and language achievement. *Psychology in the School, 17,* 530-535.

Pellegrini, A. D., & Galda, L. (1982). The effects of thematic fantasy play training on the development of children's story comprehension. *American Education Research Journal, 19,* 443-452.

Pepler, D. J., & Ross, H. S. (1981). The effects of play on convergent and divergent problem-solving. *Child Development, 52,* 1202-1210.

Piaget, J. (1962). *Play, dreams and imitation in childhood*. New York: W. W. Norton(Original work published in 1951).

Rogers, C. S., & Ponish, K. K. (1987, April). Control of level of challenge: Effects on intrinsic motivation to play. *Abstracts: Society for Research in Child Development, Vol. 6*. Chicago, IL: Society for Research in Child Development.

Also in *Resources in Education* (RIE), March, 1988, ERIC ED 287555.

Rogers, C. S., & Sawyers, J. K. (1988). *Play in the lives of children*. Washington, DC: National Association for the Education of Young Children.

Rosen, C. E. (1974). The effects of sociodramatic play on problem-solving behavior among culturally disadvantaged preschool children. *Child Development, 45*, 920-927.

Wilson, J. M. (1985). Play in the hospital. In C. C. Brown & A. W. Gottfried (Eds.), *Play interactions: The role of toys and parental involvement in children's development* (pp. 113-121). Skillman, NJ: Johnson & Johnson.

Chapter 6

Can We Help Children Move and Think Critically?

Craig A. Buschner

Finding ways to help children learn to grow is the task of early childhood educators. Teachers of movement and play have the opportunity to actively involve children in many types of learning. One type of learning receiving increased attention is the development of critical thinking skills. Most of this influence has resulted from national studies that find children and young adults deficient in this area. Some feel that teachers are not helping children to "think" regardless of subject matter. Lipman (1988) defines critical thinking as "skillful, responsible thinking that facilitates good judgment because it (1) relies upon criteria, (2) is self-correcting and (3) is sensitive to context." Maxwell and Paulu (1987) suggest that teachers give students a "manageable way to evaluate information."

Traditionally, play and movement programs for children have emphasized acquisition of motor skills so that children can become both competent and confident movers. However, many feel that developing intellectual skills is also a goal of quality movement programs for children. Despite the lack of documentation that critical thinking takes place in early childhood movement programs, movement experiences can be a vehicle for the development of analytical skills.

This paper provides a means for educators to understand the concept of critical thinking. Specifically, the paper will focus on four areas: (1) the nature of critical thinking; (2) a brief literature review; (3) practical suggestions on how to integrate thinking skills in early childhood physical education programs; and (4) the educator's role in promoting thoughtful movement.

Can We Help Children Move and Think Critically?

As a physical educator I have always believed that I was teaching children to think as well as move. A few weeks back I was teaching a kindergarten class about personal and general space. I defined the two terms, gave examples, and proceeded to have the children solve a number of movement tasks. In personal space we worked on body part identification, made body shapes, and discovered the limits of personal space by stretching in all directions and levels. In general space we used the locomotor patterns to find different ways the body could move, varying the time, force, and flow of movement. We culminated the lesson by playing "Don't Bump" or what the movement educators call "safety training." A majority of the 28 children stayed on task for the 30 minute class and appeared to understand the lesson focus. Proudly, I felt they *learned* to differentiate between personal and general space as I closed the lesson with a question and answer period. My intuition told me that the children were *thinking* and *moving* based upon my observations and their responses to the problems I posed.

After surveying the literature in the areas of early childhood education, motor development, elementary physical education, research on training, and critical thinking, I am left with a personal question: Did I In Fact Teach The Children To Think? As I began to mull over the concept of thinking skills, numerous questions came to mind. What are thinking skills? What is the difference between thinking and thinking critically? Are young children capable of critical thinking in physical education? Can critical thinking skills in young children be identified and measured? Finally, a pessimistic question: Should physical educators even bother with thinking skills in that most would agree that our unique contribution to children resides in the areas of motor skill and physical fitness?

This paper provides a means for educators, particularly physical educators, to understand the concept of thinking skills and more specifically critical thinking skills. Following my assumptions, four areas will be addressed: (1) the nature of critical thinking; (2) a brief literature review on thinking skills in children; (3) practical suggestions on how to integrate thinking skills in early childhood physical education programs; and (4) the educator's role in promoting thoughtful movement. During this venture into critical thinking I hope to provide an answer to the question posed in the presentation title.

My own personal beliefs about young children should be stated before I proceed with each section of this paper. These assumptions provide me with a starting point from which to base my comments and reflect on my own work with preschool children over the past 15 years.

1. Early childhood educators must be concerned with the "whole child." That is, we teach children and not subject matter. Children develop intellectually, physically, socially, and emotionally, and each area is important to the child's growth and development. Furthermore, effective teaching and learning must activate all three domains of learning (cognitive, affective, psychomotor). Finding ways to help children learn and grow is the task of early childhood educators. In short, movement is learning for young children.

2. Through movement young children begin to make sense of themselves, their bodies, their surroundings, and their world. Boucher (1988) said that "early movement experiences are the basis of all learning and constitute the child's first language" (p. 452). Movement based curricula is the "alphabet" for learning about movement and is most logical for young children (Gabbard, 1988; Schurr, 1975; Siedentop, Herkowitz & Rink, 1984; Stanley, 1977).

3. How we teach young children is as important as what we teach them.

4. Skillful movement is the primary goal of preschool physical education programs. However, planning cognitive and effective learnings are also worthy program goals.

5. Young children have a right to "structured" as well as "unstructured" time in physical education and motor play, although, my ideas will focus primarily on structured experiences for children.

6. Children in today's society are being "hurried" to grow up and this presents problems for all educators of young children (Elkind, 1972, 1988; Katz, 1988; Postman, 1985; Seefelt, 1985).

Cognitive Development in Children

Before we take an excursion into the nature of critical thinking I feel it's important to discuss cognitive development in children. Cognitive development includes thinking, discovering, acquiring knowledge, making decisions, and solving problems. Jean Piaget's stages of cognitive development are often used when attempting to understand how children think (Wadsworth, 1971). Piaget's four stages of intellectual development include the *sensory-motor stage, preoperational stage, concrete operations stage*, and the *formal operations stage*. It is the

second stage, preoperational, where most preschool children function. After passing through the sensory-motor stage during the first 2 years of life children begin prelogical thought and attempt to find rudimentary solutions to everyday problems. Young children from ages 2 through 7 demonstrate an ability to perceive, conceptualize, imagine, and use language. Young children learn through *accommodation* and *assimilation*. We know that children learn from work and from play. Both are essential. Moreover, both manipulative and verbal experiences, often accomplished through motoric play, help to stimulate thinking and learning. This explains why Piaget advocated both active and interactive environmental learning. Piaget determined that "knowledge is not transmitted verbally" but absorbed through a variety of experiential learnings (Penrose, 1979).

Cognitive development occurs in physical education and can be classified into perceptual abilities (visual and kinesthetic), movement awareness, inquiry, creativity, relationships, and academic reinforcement (Curtis, 1987; Gabbard, LeBlanc, & Lowy, 1987; Gallahue, 1982). Cognitive development closely relates to how children process information in the movement environment. Keogh and Sugden (1985) see children trying a three step thought process when attempting movement tasks: (1) movement preparation that uses the body, environment, space, and time; (2) generation or selection of a movement plan; and (3) movement plan execution. All three steps require thinking, that is, reflection and thought before and during movement.

Critical Thinking

Critics of education have been complaining for years that schools and colleges are not helping students to learn how to think. Most of the recent criticism has resulted from national studies that find students deficient in thinking skills. Fortunately or unfortunately, depending upon your view, we are experiencing not only increased attention but a downward movement, from college to preschool, of the thinking skills curriculum. Thinking skills books, articles, and programs have become one of the in vogue topics in education today (Brown, 1983; Chance, 1986; de Bono, 1983; Johnson, 1984; Joyce, 1985; Nickerson, 1984). However, this overnight surge of interest has confused many educators and has raised numerous questions concerning the validity of this educational thrust (Bereiter, 1984; Beyer, 1984a, 1984b; de Bono, 1984; Sternberg, 1985a, 1985b, 1987; Paul, 1984, 1985; Rose, 1986; Wassermann, 1987).

Now we need to take a moment to differentiate between the terms "thinking skills" and "critical thinking skills." Both terms have many definitions depending upon whom you read. Thinking, quite simply, is to use the mind rationally, to conceive or form in the mind, particularly an opinion or belief. Many consider Benjamin Bloom's (1974) Taxonomy of the cognitive domain to be the essential thinking skills to be learned by pupils. This hierarchy includes knowledge, comprehension, application, analysis, synthesis, and evaluation. These six levels of cognition constitute the diet of preservice teacher education, inservice workshops, textbooks, curricula, and statewide teacher evaluation systems. However, a number of educators, philosophers, and cognitive psychologists feel Bloom's work only scratches the surface of potential thinking skills that need to be taught (Ennis, 1985; Paul, 1985). Beyer (1988) has expanded Bloom's levels to include translation, interpretation, extrapolation, and reasoning (inductive and deductive).

Although there are many different theories of thinking, Raths, Wassermann, Jones, and Rothstein (1986) suggest 14 thinking tools that include: comparing, interpreting, observing, summarizing, classifying, making decisions, suggesting hypotheses, imagining and creating, criticizing and evaluating, designing projects and investigations, identifying assumptions, applying principles in new situations, coding for certain patterns of thinking, and gathering and organizing data. Beyer (1984a) defines thinking as mental processes that help people to formulate thoughts, to reason about, or to judge. Beyer (1988) goes beyond this definition to propose Level I Thinking Strategies that include problem-solving, decision-making, and conceptualizing. Each of these thinking strategies include complex subordinate operations.

On the other hand, critical thinking includes the basic thinking skills but goes beyond these concepts to include even high order, and more complex, thought processes. I sense a need to share a variety of definitions and views of critical thinking so that we have a complex picture. Heiman and Slomianko (1985) carefully defined critical thinking as: raising questions, analysis, relying on prior knowledge, and translating ideas into examples. Put another way, critical thinking gives pupils a "manageable way to evaluate information" (Maxwell and Paulu, 1987). Ennis (1985) views critical thinking skills as "reasonable reflective thinking that is focused on deciding what to believe or do" (p. 45).

The most elaborate notion of critical thinking suggests that critical thinkers are skillful and exercise good judgment (Lipman, 1988). Lipman offers his definition by stating that critical thinking is "skillful, responsible thinking that facilitates good judgment because it (1) relies

upon context, (2) is self-correcting, and (3) is sensitive to context" (pg. 39). Lipman further explains his definition adding that "when we think critically, we are required to orchestrate a wide variety of cognitive skills, grouped in families such as reasoning skills, concept-formation skills, inquiry skills, and translation skills" (p. 43). Again, I will rely on Beyer's (1988) Level II Critical Thinking Skills list to clarify what processes critical thinkers use:

1. Distinguish between verifiable facts and value claims.
2. Distinguish relevant from irrelevant information.
3. Determine the factual accuracy of a statement.
4. Determine the credibility of a source.
5. Identify ambiguous claims or arguments.
6. Identify unstated assumptions.
7. Detect bias.
8. Identify logical fallacies.
9. Recognize logical inconsistencies in a line of reasoning.
10. Determine the strength of an argument or a claim.

Interestingly enough, some of the theorists are concerned about "thinking dispositions," working concurrently with the critical thinking operations (Ennis, 1985; Paul, 1985). For example, dispositions of critical thinkers would embrace sensitivity to others, being open-minded, focusing on the big picture in any situation, and taking a position on certain matters.

For those of you still with me, some interesting questions should surface: Are critical thinking skills content or process? Is critical thinking a separate subject or should it be embedded in other subjects? Are critical thinking skills, as defined above, appropriate for young children? So you won't think I am off base with this paper or leading you down the path of professorial snobbery, I would like to note that I am well aware that these mental operations do not coincide with typical stages of intellectual growth in young children. Nor do these critical thinking skills correspond with Piaget's preoperational stage. However, let us continue our inquiry.

Review of Literature

This review of literature will briefly describe some programs that emphasize thinking skills for children and report on a handful of empirical studies. Let me preface this review by saying that early childhood educators often side philosophically with one of two curricular approaches. One is child centered, using a "developmental"

view that often follows Piaget's or Erik Erickson's stages of child growth and development. This view emphasizes child growth across a broad range of developmental areas to include all three domains of learning (ASCD Early Childhood Education Policy Panel, 1988). The other curriculum model uses an "academic approach" that is usually content centered, and follows the traditional educational paradigm. This approach systematically sequences planned learning experiences, often through direct instruction, and children are expected to become competent in reading, language concepts, and basic arithmetic by the time they leave preschool. More often than not the thinking skills curriculum models for young children often follow the academic approach.

Chance (1986) described six programs for the teaching of thinking at both the elementary and secondary levels. These include: (1) CORT Cognitive Research Trust Thinking Lessons developed by Edward deBono; (2) Productive Thinking Program; (3) Philosophy for Children developed by Matthew Lipman; (4) Odyssey developed by the Venezuelan Ministry; (5) Instrumental Enrichment developed by Reuven Feuerstein; and (6) Thoughtful Teaching. Each of these programs is finding success in teaching thinking skills and Lipman's program claims to engage elementary aged children in critical thinking skills. However, none of these programs have been used with young children.

Examples of academic curricular models that often include systematic teaching of thinking skills would be the Montessori Method schools and the Perry Preschool Project that operated out of Ypsilanti, Michigan from 1961-1967 (Cryan and Surbeck, 1979), Englemann-Becker Model for Direct Instruction, and National Follow Through.

Stallings and Stipek (1986) provide us with a marvelous synthesis of research on early childhood teaching programs. Their review includes a description of long-term studies that included 12 preschool programs, 4 Head Start programs, the Perry Preschool program, and 2 follow-through programs. These programs have established a research base for early childhood educational programs. There are three important findings that should be shared: (1) family involvement enhances children's attitudes about school; (2) cognitive development is most likely to come from Montessori Methods, especially for 3- and 4-year-olds; and (3) children in materials-oriented problem-solving curricula scored higher on nonverbal tests.

At least four studies have attempted to challenge Piaget's stages of cognitive development, projecting that elementary aged children are capable of conditional and logical reasoning, and even critical thinking (Arnold, 1938; Enis 1975; Roberge, 1970; Shapiro and O'Brien, 1970).

Hudgins and Edelman (1986) investigated the effects of an intervention on both teachers and students (fourth and fifth graders) critical thinking skills. They found that teachers were unable to alter their traditional styles of teaching but talked less, therefore providing more opportunities for the children to talk. Thus, the children began to give additional information and supportive statements to buttress their conclusions. However, there were no significant gains by the children on the Cornell Critical Thinking Test.

Subsequently, Hudgins and Edelman (1988) studied the critical thinking skills of fourth and fifth grade children using a Test of Critical Thinking designed by the researchers. The children in the experimental group, following eight lessons, scored significantly higher than those in the control group in problem solving, application of thinking skills, and quality of their responses. In summation, critical thinking skills were taught and learned, though the population consisted of 10- and 11-year-olds. Although we are observing substantial progress in the development of early childhood programs, the research is lacking. Stallings and Stipek (1986) comment:

> Sadly lacking in early childhood education research are studies of thinking skills . . . . We have made great strides in understanding more of the relationship between teaching young children and long-term learning effects. We hope the next decade will produce replicable studies and generalizable findings on the teaching of thinking skills in preschool and elementary school classrooms (p. 751).

Physical educators have studied movement characteristics, motor behaviors, motor programming and spatial representation, motor skills, self-concept, motor creativity, and motor learning in preschool and elementary aged children, but I found not one shred of empirical evidence supporting the acquisition of critical thinking skills of young children during movement (Broadhead & Church, 1985; Espenschade & Eckert, 1980; Gallagher & Thomas, 1984; Keogh & Sugden, 1985; Melville, 1988; Wickstrom, 1977; Zaichkowsky, Zaichkowsky, & Martinek, 1980).

Practical Suggestions

This portion of the presentation will provide you with some practical suggestions for helping children to think, maybe even critically, when engaged in movement. Even though our critical thinking research base is insufficient, and most of us would question the appropriateness of

such skills with preschool children, we have two choices before us. First, we can support the status quo, that is, continue to teach as we have always taught and not fret about cognitive skills. Certainly, we have enough to worry about when trying to help children become motorically skilled and physically fit. Besides, the research is lacking and we have other pressing programmatic concerns that need attention. Second, we can do some critical thinking ourselves. We can begin to experiment with some rational and intuitive ideas or strategies borrowed from related research and successful practices, that we feel will help young children to think in a structured movement setting. Please be reminded that we can advocate either of the two curricular models for preschool children and still accomplish this goal. Furthermore, the goal can be accomplished without putting undue academic pressure on young children.

Educators know that when teaching children in physical education, thinking, feeling, and moving are coequal partners. Skillful movement requires skillful thought. Young children often learn through discovery and are typically movement hungry. These characteristics, combined with a child's innate desire for play, set the stage for finding exciting ways to learn. We must work toward precritical thinking skills or concepts that will lay a foundation for higher order processes. These skills would include: classification or grouping; seriation; spatial relations; temporal relations; observation; problem-solving; goal setting; decision-making that involves choosing alternatives; identifying relationships and patterns; drawing if-then logical forms; and understanding cause-and-effect relationships. These thinking skills can be integrated into a movement based physical education program and would not be taught as a separate subject. The categories of spatial awareness, effort qualities, and relationships fit nicely with the aforementioned precritical thinking skills.

The Learning Environment

Teachers can prepare the learning environment to provide a base for the development of precritical thinking skills. To do such involves rethinking the atmosphere for teaching and learning. For example, teachers should consider the following suggestions (Alvino, 1984; Barrel, Liebmann, & Sigel, 1988; Hendrick, 1980; Maxwell & Paulu, 1987).

1. Construct a movement environment where children are free to take risks, to try out alternative behaviors, and to use trial and error learning without being criticized. For example, I would encourage

many different ways to move the body in personal space and general space without some preconceived notion of the better ways to move.

2. Select movement tasks that are within the child's range, but expect and allow forregression in growth patterns.

3. Encourage invention, fantasy, and self-reliance. These can be enhanced by supplying the environment with different types of materials, equipment, and diverse movement opportunities. For example, we could pretend that the children are dinosaurs looking for food in a high place (i.e., the outdoor play structures).

4. Use "matching" or comparing new information or movements with those they already know.

5. Somewhat related to matching, but a different thinking skill, involves paired associate activities. For example, movements up and down or over and under help young children to reinforce directions and relationships of the body in space.

6. Use "guided imagery" to teach the young child about movement. This can include a multisensory approach using touch, vision, hearing, and feeling.

7. During small group discussions, help children elaborate on how they feel when moving fast, at a low level, or in unison with a friend.

8. Encourage young children to set goals that are possible to achieve within a specific time frame. We can help them to determine what is working for them and what is not.

Pedagogical Behaviors

The way in which teachers interact with children is vital to developing precritical thinking skills. The tremendous gains in pedagogical research clearly tell us that the teacher is the most important variable in the learning environment. So what should effective early childhood educators do? First, teachers should have a repertoire of direct and inquiry strategies for learning. I have found that guided discovery, problem solving, and exploratory approaches work best with young children (Mosston, 1981). When using these indirect or inquiry styles, both convergent and divergent thinking occur. Such flexibility can work towards meeting the individual differences in children. Children ages 3 and 5 cannot be expected to perform a motor pattern like an adult or even like each other. Roberton and Halverson (1984) offer the following insights:

> For both assimilation and accommodation to occur, children must engage in exploring and thinking about the movement problem at hand—in

> observing trying, testing, and changing either the problem or themselves....Then, they (teachers) should help the child verbalize why it was efficient and effective (p. 10).

Indirect or inquiry teaching methods, where children have an opportunity to make decisions about their learning, provide both the freedom and responsibility necessary to enhance one's thinking skills. These approaches are especially useful for children who are not developmentally capable of refining a specific movement and need time for movement exploration. The appropriate use of problem solving, questioning, and exploration may assist children to think and therefore make value judgments about their own learning. Indirect strategies are not, however, a license for mindless movement. Indirect or inquiry styles of teaching require teacher reflection and critical thinking. Rink's (1985) implications for learning motor skills are appropriate at this juncture. She suggests that the selection of tasks, clarity of presentation, and sequential development of tasks must be considered by teachers. Careful thinking and planning by teachers should pay dividends when children begin to move thoughtfully and skillfully.

Teachers might consider these strategies when planning movement lessons (McClenaghan & Gallahue, 1978; Hess & Croft, 1981; Roberton & Halverson, 1984; Riggs, Dodds, & Zuccalo, 1981; Schurr, 1975):

1. Praise frequently, especially the unusual responses to movement challenges.
2. Ask "What" versus Why" questions. For example, "What are some ways to move your body quickly?" This would be better than, "Why should we move our bodies quickly?."
3. Observe what thinking strategies children use, and offer useful feedback. Encourage children to make a movement plan to include thinking before, during, and after attempting a task.
4. Encourage children to think differently and attempt alternative methods. This can be accomplished by using open-ended phrases such as "find a way," "show me," "who can be the first to think," "try to," "suppose you," "how else," "how many," etc. The children's responses might include doing, telling, or drawing a picture.
5. Explain, label, and identify the movement tasks. Pictures of athletes and others moving can stimulate thinking, teach vocabulary, and focus attention on detail.
6. Use individual movement tasks with the idea of working toward eventual group work and interaction. Small group discussions can be stimulating for children if handled in the proper manner. Try the Think-Pair-Share strategy.

7. Model behaviors that involve the precritical thinking skills.

8. Put many different types of questions to individuals and groups. Be prepared to wait.

9. Experiment with verbal cues and rehearsal strategies. Have the children think out loud or use self talk.

10. Ask the students to verbally summarize what they have learned.

Teachers of movement can explicitly plan for precritical thinking skills in an atmosphere that is caring, sensitive, unhurried, and meaningful to children.

Educator's Role

My taxonomy of educators includes teachers, administrators, professional preparation personnel, and researchers. Each of these educators has a responsibility to thrust early childhood education into the year 2000. In addition, these professionals must collaborate and work towards a common agenda. One portion of this agenda should be the consideration of precritical thinking skills. If we want children to be active learners we must help them activate both their bodies and their minds. In doing so we must be careful of cramming or pushing academic skills for young children who are not ready. Our analogy in physical education is athletics. Critical or reflective thinking on our part is essential.

The skills and competencies needed by educators are varied, but those interested in young children should be creative, innovative, and open-minded. They should be knowledgeable of teaching strategies, curriculum development, motor learning and development, and evaluative procedures. Graham, Holt/Hale, and Parker (1987) suggest the following minimal competencies for teachers of movement:

1. Understand the progression and development of basic skill themes and movement concepts.

2. Learn to evaluate each child's generic levels of motor skill proficiency.

3. Develop skill in observing young children move.

Let us return to my initial question that resulted from teaching general and personal space to 5-year-olds. Did I in fact teach the children to think? I did use indirect methods and the children were creative and successful with their responses to my movement challenges. I want to answer the question with a resounding "Yes," but, in all honesty I was not conscious of many of the precritical thinking skills and literature that are presented here. Even though our best current measure of thinking skills in young children is teacher

observation, we cannot claim that we teach critical thinking or precritical thinking yet. Nevertheless, we can become familiar with the literature and trends, attend contemporary conferences, request staff development, establish partnerships with university faculty and researchers, carefully observe thinking patterns in young children, and begin rational experimentation. These experiments will take greater pedagogical awareness on the part of educators.

Can educators forge the linkage between moving and learning? Sure we can. Will early childhood educators be ready to tackle the issue of a thinking skills curriculum by the turn of the century? We should be and must be for no other reason than children are why we as educators exist.

References

Alvino, J. Nurturing children's creativity and critical thinking skills. *Education Digest, 49* (2), 48-49.

Arnold, O. L. (1938). Testing ability to use data in the fifth and sixth grades. *Educational Research Bulletin, 17*, 225-259, 278.

ASCD Early Childhood Education Policy Panel (1988). Analysis of issues concerning public school involvement in early childhood education. In Warger, C. (Ed.), *A resource guide to public school early childhood programs*, 95-115.

Barrell, J., Liebmann, R., & Sigel, I. (1988). Fostering thoughtful self-direction in students. *Educational Leadership, 45* (7), 14-17.

Bereiter, C. (1984). How to keep thinking skills from going the way of all frills. *Educational Leadership, 42* (1), 75-77.

Beyer, B. K. (1984a). Improving thinking skills—Defining the problem. *Phi Delta Kappan, 65* (7), 486-490.

Beyer, B. K. (1984b). Improving thinking skills—Practical approaches. *Phi Delta Kappan, 68* (7), 556-560.

Beyer, B. K. (1988). Developing a scope and sequence for thinking skills instruction. *Educational Leadership, 45* (7), 26-30.

Bloom, B. S. (Ed.) (1974). *The taxonomy of educational objectives: Affective and cognitive domains*. New York: David McKay.

Boucher, A. (1988). Good beginnings. *Journal of Physical Education, Recreation and Dance, 59* (7), 42.

Broadhead, G. D., & Church, G. E. (1985). Movement characteristics of preschool children. *Research Quarterly for Exercise and Sport, 56* (3), 208-214.

Brown, J. L. (1983). On teaching thinking skills in the elementary and middle school. *Phi Delta Kappan, 64* (10), 709-714.

Chance, P. (1986). *Teaching thinking*. Curriculum Report of the National Association of Secondary School Principals, 15 (5). (ERIC Document Reproduction Service No. 271 816)

Cryan, J. R., & Surbeck, E. (1979). *Early childhood education: Foundations for lifelong learning*. Bloomington, IN: Phi Delta Kappa.

Curtis, S. R. (1987). New views on movement development and the implications for curriculum in early childhood. In Seefeldt, C. (Ed.), *The early childhood curriculum: A review of current research*, pp. 256-277.

deBono, E. (1983). The direct teaching of thinking as a skill. *Phi Delta Kappan, 64* (10), 703-708.

deBono, E. (1984). Critical thinking is not enough. *Educational Leadership, 42* (1), 16-17.

Elkind, D. (1972). Misunderstandings about how children learn. *Education Digest, 37* (9), 40-42.

Elkind, D. (1988). The resistance to developmentally appropriate educational practice with young children: The real issue. In Warger, C. (Ed.), *A resource guide to public school early childhood programs* (pp. 53-62).

Ennis, R. H. (1975). Children's ability to handle Piaget's propositional logic: A conceptual critique. *Review of Educational Research, 45*, 1-41.

Ennis, R. (1985). Goals for critical thinking/reasoning curriculum. *Educational Leadership, 45* (2), 45-48.

Espenschade, A. S., & Eckert, H. M. (1980). *Motor development* (2nd Ed.). Columbus, OH: Charles E. Merrill.

Gabbard, C., LeBlanc, B., & Lowy, S. (1987). *Physical education for children: Building a foundation*. Englewood Cliffs, NJ: Prentice-Hall.

Gabbard, C. (1988). Early childhood physical education. *Journal of Physical Education, Recreation, and Dance, 59* (7), 65-69.

Gallagher, J. D., & Thomas, J. R. (1984). Rehearsing strategy effects on developmental differences for recall of a movement series. *Research Quarterly for Exercise and Sport, 55*, 123-128.

Gallahue, D. (1982). *Understanding motor development in children*. New York: John Wiley & Sons.

Gallahue, D. (1982). *Developmental movement experiences for children*. New York: John Wiley & Sons.

Graham, G., Holt/Hale, S., & Parker, M. (1987). *Children moving* (2nd Ed). Palo Alto, CA: Mayfield.

Heiman, M. & Slomianko, J. (1985). *Critical thinking skills*. Washington, D.C.: National Education Association.

Hendrick, J. (1980). *Total learning for the whole child*. St. Louis: C. V. Mosby.

Hess, R. D., & Croft, D. J. (1981). *Teachers of young children*. Boston: Houghton Mifflin.

Hudgins, B. B., & Edelman, S. (1986). Teaching critical thinking skills to fourth and fifth graders through teacher-led small-group discussions. *Journal of Educational Research, 79* (6), 333-342.

Hudgins, B. B., & Edelman, S. (1988). Children's self-directed critical thinking. *Journal of Educational Research, 81* (5), 262-273.

Johnson, T. W. (1984). *Philosophy for children: An approach to critical thinking*. Bloomington, IN: Phi Delta Kappa.

Joyce, B. (1985). Models for teaching thinking. *Educational Leadership, 42* (8), 4-7.

Katz, L. G. (1988). Engaging children's minds: The implications of research for early childhood education. In Warger, C. (Ed.), *A resource guide to public school early childhood programs* (pp. 32-51).

Keogh, J. F. & Sugden, D. (1985). *Movement skill development*. New York: Macmillan.

Lipman, M. (1988). Critical thinking—What can it be? *Educational Leadership, 46* (1), 38-43.

Logsdon, B., Barrett, K., Broer, M., McKee, R., & Ammons, M. (1977). *Physical education for children: A focus on the teaching process*. Philadelphia, PA: Lea & Febiger.

Maxwell, L., & Paulu, N. (1987). *Eight pointers on teaching children to think*. Research in Brief from the Office of Educational Research and Improvement. (ERIC Reproduction Service No. 277 992)

McClenaghan, B., & Gallahue, D. (1978). *Fundamental movement: A developmental and remedial approach*. Philadelphia: W. B. Saunders.

Melville, D. S. (1988). Thinking and moving. *Strategies, 2* (1), 18-20.

Mosston, M. (1981). *Teaching physical education*. Columbus, OH: Charles Merrill.

Nickerson, R. S. (1984). Kinds of thinking taught in current programs. *Educational Leadership, 42* (1), 26-36.

Paul, R. W. (1984). Critical thinking: Fundamental to education for a free society. *Educational Leadership, 42* (1), 4-14.

Paul, R. W. (1985). Bloom's taxonomy and critical thinking instruction. *Educational Leadership, 42* (8), 36-39.

Penrose, W. O. (1979). *A primer on Piaget*. Bloomington, IN: Phi Delta Kappa.

Postman, N. (1985). The disappearance of childhood. *Childhood Education, 61* (4), 286-293.

Raths, L. E., Wassermann, S., Jones, A., & Rothstein, A. (1986). *Teaching for thinking: Theory, strategies, and activities for the classroom*. New York: Teachers College Press.

Riggs, M. L., Dodds, P., & Zuccalo, D. (1981). *Early childhood*. (Basic Stuff Series II). Reston, VA: AAHPERD.

Rink, J. (1985). *Teaching physical education for learning*. St. Louis: Times Mirror/Mosby.

Roberge, J. J. (1970). A study of children's abilities to reason with basic principles of deductive reasoning. *American Educational Research Journal, 7*, 583-596.

Roberton, M. A., & Halverson, L. E. (1984). *Developing children Their changing movement: A guide for teachers*. Philadelphia: Lea & Febiger.

Rose, J. (1986). Critical thinking: Have we over-complicated the issue? *Thrust, 15* (6), 21-24.

Schurr, E. (1975). *Movement experiences for children: A humanistic approach to elementary school physical education*. Englewood Cliffs, NJ: Prentice-Hall.

Seefeldt, C. (1985). Tomorrow's kindergarten: Pleasure or pressure? *Principal, 64* (5), 12-15.

Shapiro, B. J., & O'Brien, T. C. (1970). Logical thinking in children ages six through thirteen. *Child Development, 41*, 823-829.

Siedentop, D., Herkowitz, J., & Rink J. (1984). *Elementary physical education methods*. Englewood Cliffs, NJ: Prentice-Hall.

Stallings, J. A., & Stipek, D. (1986). Research on early childhood and elementary school teaching programs. In Wittrock, M.C. (Ed.), *Handbook of Research on Teaching* (pp.727-753).

Stanley, S. (1977). *Physical education: A movement orientation*. Toronto: McGraw-Hill.

Sternberg, R. J. (1985a). Teaching critical thinking, Part 1: Are we making critical mistakes? *Phi Delta Kappan, 67* (3), 194-198.

Sternberg, R. J. (1985b). Teaching critical thinking, Part 2: Possible solutions. *Phi Delta Kappan, 67* (4), 277-280.

Sternberg, R. J. (1987). Teaching critical thinking: Eight easy ways to fail before you begin. *Phi Delta Kappan, 68* (6), 456-459.

Wasserman, S. (1987). Teaching for thinking: Louis E. Raths revisited. *Phi Delta Kappan, 68* (6), 460-466.

Wickstrom, R. L. (1977). *Fundamental motor patterns* (2nd Ed.). Philadelphia: Lea & Febiger.

Zaichkowsky, D. L., Zaichkowsky, L. B., & Martinek, T. J. (1980). *Growth and development: The child and physical activity*. St. Louis: C. V. Mosby.

Chapter 7

Movement Education and the Development of Children's Decision-Making Abilities

Elizabeth S. Bressan

Education is supposed to benefit the children who receive it. Children are supposed to be "better off" after receiving an education than they would have been if they had not received it. Identifying what those benefits are and insuring that those benefits are delivered to children is the responsibility of teachers. In the preschool and early childhood education settings, the determinations of which benefits to target for delivery are often difficult. There are financial limitations, space limitations, and personnel limitations that influence what can be offered to the children in different programs. Priorities have to be set within those limitations that are both realistic and practical. An "undelivered" benefit is no benefit at all.

The considerable pressure on early childhood educators to address the acquisition of academic skills has further confused an already confounding situation. What is an academic skill? Are specific behavioral products such as reading, writing, and working with numbers the "academic skills" essential to the young child? Or are the process-oriented cognitive operations of reasoning and creating and decision-making supposed to receive early emphasis in a young child's education? From a theoretical perspective, it would seem sensible (realistic and practical) to identify the process-oriented behaviors that the children can begin to acquire. Then, teachers could regard numbers or letters or words...or clay or colored paper or things to swing on or climb...as content areas to which the process skills could

be applied: reasoning about the use of a thing on which to swing. Within this commitment to process-centered programs, the focus of this paper is on the cognitive skill of decision-making, with specific applications to the sensorimotor portion of the curriculum that is devoted to children's movement education.

Decision-making may be regarded as a skill. Like other skills, it can be learned and refined only through practice. A teacher can accelerate the learning and refinement of the skill of decision-making by incorporating opportunities to practice it in as many different content areas as possible. Movement education is a playful and thoughtful approach to becoming skillful in the performance of motor skills. Because it emphasizes a thoughtful approach, it includes the children as decision-makers about their own movement performances.

Because movement education is a playful approach, it attempts to present content in a fashion that is compatible with at least four of the five levels in Ellis's sequence of play behavior (Ellis, 1973). The first level, approach-avoidance, recognizes that children will have an initial reaction to participation to the play environment. They may be attracted to it, and "jump right in." On the other hand, they may experience some hesitancy, and "hold back." Within movement education, the children are given sufficient time and support to allow them to "hold back" until they (or the teacher) can figure out what to do to reduce the impact of the source of their "avoidance," whether that source is psychological, physical, or environmental. In movement education, children are given the opportunity to investigate the environment in which they have been invited to move, and then to explore it in ways either suggested by the teacher or thought of by the children themselves. Manipulation of that environment and the tasks to be performed in that environment is encouraged through providing children with opportunities for decision-making. Fantasy, although usually considered a level beyond decision-making, is also a feature of movement education as children have the opportunity to interact creatively with the environment and the tasks performed.

The specific content of movement education may be grouped under the three major motor development headings of balance control, locomotion, and manipulation. Children's capacity for balance control matures most quickly, with locomotion following closely behind. Children's manipulative skills are the last to mature, with many children not gaining full neurological capacity for control until ages 8 or 9. For this reason, teachers in early childhood movement education programs are encouraged to focus on balance and locomotor activities, such as those associated with gymnastic and dance types of movements. Manipulative movements, such as those associated with

games and sports, are fine for investigation and exploration, but care must be taken to provide for the unpredictable outcomes of manipulative attempts. When a child "goes to throw a ball," it must be attempted in an environment in which there is no penalty for erratic flight paths!

Within movement education, the general responsibility of the teacher of young children may be defined as initiating and extending the children's play. Initiating play (Spodek and Saracho, 1988) involves the following:

- Enriching children's store of information by providing them with new activities;
- Rearranging the play area from time to time to ensure environmental stimulation;
- Providing novelty by introducing new materials or new forms of previously utilized materials;
- Involving the children in planning activities or changes in the play environment (in order to cultivate their anticipation and planning skills).

Extending children's play (Spodek and Saracho, 1988) involves the following:

- Participating with the children (*only* when it can be done without destroying the structure *they* have given to the situation);
- Adding or deleting materials from the play environment to foster the performance of new play behaviors;
- Suggesting new options to the children through the asking of questions;
- Encouraging the children to become good observers of other children, even to the point of having them copy, then modify a way of playing they have observed.

In terms of the kinds of decisions that can be delegated to children during movement education, these come to mind as possibilities: when to play, where to play, with whom to play, what to play, with what to play, and how to play. Obviously, not all possible decisions should be available for the children all of the time. Indeed, a teacher should vary which decisions are available so that children begin to learn about the notion of "freedom within limitations." Whenever giving the children opportunities to make decisions, the teacher takes on the responsibilities of monitoring the children's actions for safety, insuring that the children experience the consequences of their actions (within reasonable time and intensity limits), and helping the children evaluate their actions (within language/communication limits).The focus within movement education for young children on the balance and locomotor types of challenges opens a wide variety of activity

areas from which the teacher may make content choices. For example, an environment that challenges the children's traveling skills would encourage walking, running, sliding, rolling, hopping, jumping, galloping, skipping, etc. Along with traveling challenges, the need to work on stopping skills is apparent, such as "freezing" in a static balance, or finding a counter-balance (balance by pushing or leaning on someone or something). Making different shapes with their bodies, such as stretched, curled or twisted shapes can be introduced as more advanced challenges, as can other body actions, such as hanging, spinning, climbing, swinging, swaying or dodging.

In terms of the exact nature of the choices that might be left to the children, three major categories are suggested. First, the children may be given the opportunity to make decisions about the *space* they will use in their movement performance:

- the *amount* of space they will use (large or small);
- the *directions* in which they will move (forward, backward, etc.); the *levels* on which they will move (high, middle, low);
- the *pathways* on which they will move (straight or curved);
- the *extension* into space they will use (far from their own bodies or close to their own bodies).

It is also possible to conceive of giving children opportunities to make decisions about the amount of *force* they will use. Although force is an extremely difficult factor for young children to control, teachers wishing to present challenges to the control of force could focus on giving children choices about:

- The *speed* at which they move (from slowly to quickly);
- The *weight* they put into their moving (from heavy movements to light movements);
- The *flow* of their moving (from jerky to smooth).

A third area in which children may be given decisions is the broad area of the *relationships* they establish with the different elements in the play environment. For example, the children could have choices about the relationships they establish:

- To *equipment* (move in relation to a balloon, to a wand, to a bean bag, by moving over it, under, it, around it, while carrying it, etc.);
- To *implements* (move behind or beside a stick while pushing a puck with it, etc.);
- To fixed *apparatus* (over a bench, under a beam, beside a box, etc.);
- To *other children* (move behind another child, cooperate and share with another child, etc.);
- To a *beat* (move in relation to a rhythmic pattern).

Some teachers may be hesitant to try formally to incorporate challenges to children's decision-making skills in the balance,

locomotor, and manipulative play patterns of children. Indeed, many teachers seem to regard "free play" as an opportunity to practice decision-making in a playground-type environment. For the very youngest children, the manipulation of that playground-type environment is indeed the most powerful "teaching action." The limitation styles of teaching are very useful for encouraging the development of decision-making skills. In these styles, the teacher explicitly (verbally) or implicitly (through the arrangement of the play environment) sets limits on what actions the children can take. Then, the children are given time to investigate, explore, and manipulate that environment within the limits set. Indeed, the children are encouraged to come up with as many "legal" options as they can. In the direct styles of teaching, the children are provided with a demonstration or a model of the options for activity that the teacher has decided to offer them. Then, they may make their selection from the choices.

As the children mature, both the challenges built into the environment and those challenges communicated to the children provide the opportunities for decision-making. Whether working with the younger children or the older children, the specific educational outcomes associated with the practice of the skill of decision-making are manifested in children's acquisition of a number of sub-skills. The following sub-skills are proposed as outcomes of practice in decision-making:

- The capacity to recognize the difference between choice and no-choice situations;
- The capacity to identify options in choice situations;
- The capacity to anticipate/associate consequences with each option;
- The capacity to analyze options in terms of the advantages and disadvantages of the consequences.;
- The capacity to accept responsibility for choices by accepting the consequences of the action chosen.

The highly motivational contexts of the sensorimotor play environments associated with movement education, coupled with the ease with which a thoughtful (and playful) teacher can manipulate that environment and the challenges it presents to children, suggest that the movement education program can be a rich opportunity for the practice of decision-making skills. Many well-meaning teachers "leave the playground alone" in the belief that the children must have some "free" time to run their own lives. That children need "free time" is true...there is probably entirely too much external structure in most children's lives. However, they need some freedom in all aspects of their lives, not just that portion on the playground. But to give them

total freedom (within safety parameters, of course) on the playground is to throw away one of the richest environments in which a teacher can create opportunities. Working on the skills of decision-making in that environment only assists children to take more control of their actions on the playground. As children gain control, they gain self-confidence. While there is some reason to believe self-confidence is domain specific among older children and adults, it appears to be quite generalized with younger children. This general feeling of self-confidence, and the development of some rudimentary decision-making skills, certainly appear to be worthwhile contributions to children's overall development.

Bibliography:

Ellis, M. (1973). *Why people play*. Englewood Cliffs, NJ: Prentice-Hall.

Spodek, B. and Saracho, O. (1988). The challenge of educational play, in Bergen, D. (Ed.). *Play as a medium for learning and development*. Portsmouth, NH: Heinemann Educational Books, Inc. (pp. 9-22).

Chapter 8

How Many Ways Can...I? Problem-Solving Through Movement

Fran Cleland

The implementation of a problem-solving approach in teaching preschool children creates an environment that fosters positive learning behaviors. First, as a child-centered approach, it involves children in the process of learning. Children are encouraged to explore and discover several solutions to the problems presented by the teacher. Problem-solving therefore promotes divergent thinking, acceptance of ideas, and helps in motivating children to continue the discovery process. Knowledge that there are still other ways keeps the cognitive process kindled. Piaget (1971) suggested that this type of open-ended process makes learning a self-perpetuating process.

Mosston (1966) described this style of learning/teaching as one which emphasizes the dependency of children's responses upon the teacher's clues. The degree of freedom and self-involvement, independent of the teacher's control, is almost complete, because the series of problems is still designed and presented by the teacher. The processes of inquiry, exploration, discovery and judging the merit of one's discoveries are fully conducted and executed by the learner.

It is the teacher's responsibility to design problems and to formulate questions which facilitate the presentation of problems. Problems should be developmentally appropriate, relevant to the subject matter, and adapted to the experience of the children. Teachers must have an adequate grasp of the content specific to a domain of learning prior to designing problems. Teachers must also learn to modify problems during the learning process. These modifications should be based on the children's responses. This provides for a dynamic, flexible, and interactive learning experience. As a result of well-designed problems,

children may discover facts, relationships, variations, and concepts.

A problem-solving style of teaching is appropriate for helping children acquire skills across domains. It offers an exciting way to promote skill acquisition within the movement domain. Preschool children are typically within the beginning level of movement skill learning (see Gallahue, 1987). Indirect teaching styles focusing on children's discoveries and promoting exploration are appropriate to implement at this level. It is very important for preschool children to discover the many different ways that their body can move within the three categories of fundamental movement skills. These three categories, locomotion, manipulation, and stability, and the movement concepts of effort, space, and relationships are the ingredients for designing problems within the movement domain (see Gallahue, 1987; Graham, Holt/Hale & Parker, 1987).

Since the foundation of movement-problem solving is based on the categories of movement and the movement concepts, the teacher must have a thorough knowledge of both. Examples of movement-problems based on these ingredients follows:

Concept: Movement Problem based on manipulation, axial movements (twist, swing) & the Movement Concepts of Space (shapes, level, range) using a clothing item: *Sweatshirts.*

Description: The teacher poses problems that emphasize the many ways that a sweatshirt can be used.... Can you swing your sweat-shirt? Can you throw your sweat-shirt up in the air and catch it with different parts of your body? Can you have a friend sit on your sweat-shirt and spin your friend around? Can you and three other friends make a group shape with all of your sweat-shirts and keep the sweat-shirts stretched out?

Concept: Movement-Problem based on Manipulation.

Description: Using many different kinds of balls, spherical objects, bean bags, and balloons, sequential questions are posed to the children. An area of the play space or gymnasium could have these play objects scattered about. The children could be allowed first to explore freely the movement potential of the objects. The teacher could then interject his/her presence, comment on movement solutions, and ask questions to help the children elaborate and refine their movement. Some sample questions might be: Which kind of toy would balance and stay on different parts of your body? Which toy can you and a friend bat back and forth? What parts of your body can you use to bat this toy back and forth?

The movement concepts, effort, space, and relationships are especially important in helping the children elaborate and refine. For example, range of movement is within the movement concept of space. Based on range, you

can ask the children how to change the size of their movement solution.

Concept: Movement-Problem focusing on creating *Movement-Sentences.* These phrases are based on pictures of children in motion, playing some sport, or simply executing a motional type of action.

Description: The teacher asks the children first to make the exact shape as shown in the picture. Then the teacher poses the problem of: What do you think happened right before the picture was taken? Can you show me that movement? Then the teacher develops the movement-sentence by asking them to execute the movement(s) that might occur right after the picture was taken. The children are then encouraged to figure out how to connect the three different movements. *Action words* can be used as transitions. For example, how could you spiral from one movement to the next...explode... spin...collapse...jump... and so forth! The problem can be elaborated upon by asking the children to do the movement-sentence very fast...at different levels...to music...with two other children.... The possibilities are endless when the movement concepts are applied. The movement concepts are described in Graham et al. (1987).

When children solve movement-problems, they are moving to learn and learning to move! Teachers should take care to accept all ideas and assist the children in refining their movement solutions. It is also important to help them develop their solutions to the movement-problems presented. This type of teaching fosters an atmosphere of excitement and discovery by cultivating the creativity of each and every child!

References

Gallahue, D. L. (1976). *Motor development and movement experiences for young children.* New York: Wiley.

Gallahue, D. L. (1987). *Developmental physical education for today's elementary school children.* New York: Macmillan Publishing Company.

Graham, G., Holt/Hale, S. & Parker, M. (1987). *Children moving.* Mountain View, California: Mayfield Publishing Company.

Mosston, M. (1966). *Teaching physical education — From command to discovery.* Columbus, Ohio: Charles E. Merrill Publishing Company.

Piaget, J. (1971). *Structuralism.* London: Routledge and Kegan Paul.

Bibliography

Burns, Mary T. (1986). Musical Creative Learning and Problem Solving. *The Creative Child and Adult Quarterly, 11*, 234-240.

Freeman, J. (1985). The early years: Preparation for creative thinking. *Gifted Education International, 3*, 110-104.

Kennett, Keith F. (1984). Creativity: Educational necessity for modern society. *Education, 105*, 2-6.

Kontos, S. & Nicholas, J. G. (1986). Independent problem solving in the development of metacognition. *The Journal of Genetic Psychology, 147*, 481-495.

Ridley, C. A. & Vaughn, S. R. (1982). Interpersonal problem solving: an intervention program for preschool children. *Journal of Applied Developmental Psychology, 3*, 177-189.

Thompson, R. W. & Hixson, P. K. (1984). Teaching parents to encourage independent problem solving in preschool-age children. *Language, Speech and Hearing Service in Schools, 15*, 178-181.

Torrance, Paul E. (1967). Uniqueness and creativeness: the school's role. *Educational Leadership*, March, 493-496.

Chapter 9

The Development of Self-Esteem in Children

Ambrose E. Brazelton

I know that I am somebody because God don't make no junk!!
I'm unique and just as priceless as an heirloom in a trunk, There's no one in this wide, wide world whom I would rather be,
I treasure much the pleasure and the chance to just be me.
A positive self-image is a must for total growth,
Change those stresses to successes, that's a realistic oath.
Dear God convince me daily, give me optimistic spunk,
I must shout "I am somebody" 'cause you don't make no junk!

Enumerable factors of daily living experiences make the author of the above poem dynamically aware of his "somebodiness." The grandson's regular requests for a shoulder ride, the retirement check's arrival on the first of each month, Holt/Hale's invitation regarding my involvement in this conference, are but a few of the constant reminders that I can't be worthless.

But even greater than the worship of grandchildren, monthly monetary income, and kind words from Holt/Hale and her mother, is the following indisputable fact: In the year 1875, eight human beings (four males and four females) selectively paired off, did that beautiful thing called human mating, and four babies came into the world. Two of these infants were males, two were females. Then in 1900, the four selectively paired off, did that beautiful thing called human mating, and shortly thereafter two babies were born...one a male, one a female. And then in 1924, that male and female having selectively paired off, having done that beautiful thing called human mating, became the proud parents of the most wonderful baby that this world had ever

seen...me! The Ambrose E. Brazelton! At that moment I became a living, breathing, viable *somebody*! I didn't need to hit a home-run for deserved respect, no requirement for a three point basketball shot, didn't have to give a key note address, a *human somebody* by birth!

A few years ago Leon Sphinx and Mohammed Ali fought for the heavyweight championship. Leon defeated Ali in that historic first engagement and upon being declared the winner he proclaimed, "Now I am Somebody! *Now* I am somebody! Yesterday I was a nobody! Last week I was nothing! Invisible! Worthless! No respect! But *now*, I am Somebody! — (had to beat the heck out of another human being but *now* I am Somebody!)". Does our culture require the vanquishing of fellow human beings for visibility, prominence, self-esteem? Mr. Sphinx was Somebody the moment of his birth! Economic condition, living environment, parental status or lack of same, ancestry, race, and other hang-ups our culture seems to embrace, were really insignificant as regards his lovability and capability! We, the teachers, parents, relatives, caregivers and other providers failed to make him aware of his importance.

But let's go back to 1924. My dad possessed millions of sperm cells, and my mom manufactured up to a thousand ovum. *One particular sperm* of those millions had to unite with *a particular egg*, of that thousand, in order for me to be born. Any other egg, any other sperm and I would not be here today. Lucky? Good fortune? My dad's father possessed millions of sperm cells and his mother accrued up to a thousand eggs. Once again, *a specific sperm* had to unite with *a specific egg* for my dad's birth, and this physiological merging was duplicated by my maternal grandparents.

As we visualize the three males in my immediate heritage (each possessing millions of sperm cells) and *the particular, specific cell* which united *with a particular, specific ovum* (of a possible thousand) it becomes mind boggling to calculate the odds against my birth.

No! It wasn't luck, nor good fortune, nor a coincidence, nor was it an "oops" that Ambrose E. Brazelton came into being!!

How blessed I am to be alive, to see this gorgeous day,
To think and feel and touch and love, to plan and plot my way.
How blessed I am that long ago before my presence here,
A divine event was structured by a master engineer.
Sperm cells by the millions lodged within paternal sac,
Each one so impatient to perform his pre-planned act.
And ovum eggs a-plenty, coyly waiting wondering when
A microscopic sperm cell would invade that special den.
Twas not a mere coincidence that biologically

A specific sperm, a specific egg, the results a human me.
I am, I be, I do exist, no cause to complain or cry.
Any other sperm or egg would not have produced this I.
Oh yes! I'm blessed! Oh, Praise the Lord for a privilege granted to few,
Oh yes! I'm blessed to be alive! Please note...SO ARE YOU!!!

If I am Somebody, and each of you has the same history that I have, then you are Somebody! You are special! You are beautiful! The society would have you believe that if you aren't a recognized "Number 1," you are insignificant. The culture would have you believe that you are an ugly duckling if you lack the physical characteristics of Miss America. Our system infers that certain people are *better than* other people. This is not true! There are those who are *better off* economically, educationally, retirement-wise, etc., but none is better than any other.

Tell your neighbor, "I am Somebody!" Say to those seated close to you, "You are Somebody!" Hug someone seated near you! It seems to me that with the realization of our infallible somebodiness we would constantly celebrate our being. It seems to me that we would accentuate the positives, overtly express the blessings, make a joyful noise, etc., rather than thanking God only for Fridays! Are we having daily contests to see who can be most miserable? (Ain't it hot! Didn't it rain! Wasn't it cold! Wasn't it dry! Boy it's humid! I'm so tired!)

Our children have the same biological history we have. They are also the products of a specific cell uniting with a specific egg. Therefore, they are Somebodies who must be respected and dignified and touched!

(I need to be touched! Oh can't you see
That human strokes are therapy for me.
Your trophies, your ribbons, your M & Ms
Are worth little compared to your non-verbal gems.
So smile at me, wink, make me your pet!
I'm imperfect but God ain't through with me yet!
Caress me each day, that's my desperate plea,
Reach out! Reach out! Please touch me.....)

The development of self-esteem begins with the knowledge of "automatic Somebodiness." This must be taught, graphically internalized. It's easy to remember, "You didn't walk as early as your sister," and "Your brother was potty trained long before this," and "Why would a big boy like you continue to wet the bed?" Most feelings of inferiority develop from comparisons with others.

Is it fair to compare
Apples to grapes
Plastics to tapes
Coats to capes?

Is it fair to compare
Rocks to trees
Birds to bees
Hips to knees?

Is it fair to compare
Diamonds to pearls
Braids to curls
Boys to girls?

Is it fair to compare
Airplanes to kites
Pajamas to tights
Blacks to whites?

Is it fair to compare
Red to blue
Rain to dew
Me to you?

Is it fair to compare
Oak to pine
The sighted to the blind
Your child to mine?

Parents, Educarers, and Educaregivers have the arsenal needed to enhance positive self-image. The environment, the activities, the human relationships, and the scheduled experiences are lodged within these hands.

In the Phi Delta Kappan of February '73
Are some little known facts of modern history.
It speaks of several persons of fortune and fame
Who were initially indicted as hopelessly plain.

The first name of prominence that comes to my mind
is that relatively genius, Albert Einstein.
He was four years old before he spoke,
Didn't read until seven (AND THAT'S NO JOKE!).

The Lord was first to say, "Let there be light",
But Thomas Edison was outta sight.
'Tis interesting that his products continue to burn
Though a teacher once lamented, "He's too stupid to learn".

It was shocking to read that the great Fred Waring
Was denied the privilege of musical sharing
By a high school director who prejudged that lad
As noteless, throatless, hopeless and sad!

Winston Churchill, God rest his soul,
A statesman of honor, courageous and bold,
We know of his virtue, the history he made,
But did you know that Winney failed the 6th grade??
A newspaper editor was quick to fire
A young man whose talents he could not admire.
"Not one good idea is his primary fault,
Void of potential is this Disney named Walt!!"
Dear teacher, wake up! What is your gripe?
Who empowered you to stereotype?
I'm labeled disable, unstable, unfit.
I'm graded, berated, persuaded to quit.

Your system discourages, renders me numb,
What right have you to consider me dumb?
When concepts confuse me and I can't dig it
Your attitude tags you a social bigot.
Yes, we must wake up! Too long have we dozed!
Teacher behavior humanely imposed
Must be flaunted with zeal and deliberate haste!
A mind is a terrible thing to waste!!!

Section III

THE YOUNG CHILD Becoming Physically Educated

Chapter 10. Motor Development and Physical Education for Young Children
Lolas E. Halverson
University of Wisconsin - Madison

Chapter 11. A Dynamical Systems Approach to Motor Development: Applying New Theory to Practice
Jill Whitall
University of Wisconsin, Madison

Chapter 12. Observing and Facilitating Skill Sequencing
V. Gregory Payne
San Jose State University, California

Chapter 13. Developmentally Appropriate Movement Activities for Young Children
Andrea Boucher
Towson State University
Baltimore, Maryland

Chapter 14. Physical Fitness for Young Children
Lee Allsbrook
Middle Tennessee State University, Murfreesboro

Chapter 15. Children with Special Needs: Mainstreaming and Movement

Eleanore Grater Lewis
New England Resource Access Project
Newton, Massachusetts

Lolas Halverson discusses, in "Motor Development and Physical Education for Young Children," the significance of motor skills in the total development of the young child. She commends that it is imperative for teachers to be provided with substantial inservice training to assist them in planning meaningful and developmentally appropriate movement programs. Jill Whitall's, "A Dynamical Systems Approach to Motor Development: Applying New Theory To Practice," examines the question of how effective positive interventions by teachers and parents can be in promoting advanced motor development in infants. In "Observing and Facilitating Skill Sequencing," Greg Payne cites that high quality instruction is needed to improve the young child's movement skills; which in turn, will facilitate the development of cognitive and affective skills. Andrea Boucher focuses on movement programs for children ages 3-6 years in her paper, "Developmentally Appropriate Movement Activities for Young Children." Lee Allsbrook's, "Physical Fitness for Young Children," stresses the importance of encouraging young children to be active through appropriate experiences and positive teacher-child interaction. "Children With Special Needs: Mainstreaming and Movement," by Eleanore Lewis expresses the attitude of modifying activities to fit the needs of each child and to make sure that our curriculums do not exclude any child from the activities we plan.

Chapter 10

Motor Development and Physical Education for Young Children

Lolas E. Halverson

Introduction

In 1971, a conference entitled "The Significance of the Young Child's Motor Development" was jointly sponsored by the American Association for Health, Physical Education, and Recreation and the National Association for the Education of Young Children. The 1971 conference observer and summarizer, Dr. Keturah Whitehurst, in her closing statement, said that to the young child, movement means life. She went on to say that for the young child, movement is an important factor in self discovery; movement means discovery of the environment; movement facilitates the development of the child's concepts of time, space, and direction; movement means freedom; movement means safety; movement is an important ingredient in communication; movement is sheer enjoyment and sensuous pleasure; movement means acceptance. Dr. Whitehurst concluded by saying: "If movement means so much to the developing child, no further justification should be required for its inclusion among the major techniques in education" (Whitehurst, 1971, P. 55).

This was a great affirmation of the need for physical education in the education of young children. There seemed no doubt that those of us attending the 1971 conference believed these words of Dr. Whitehurst as we left that final session. Yet, apparently something happened on the path from that conference to this 1988 conference. Why, if we had believed and had acted on Dr. Whitehurst's summary comments, do we now have a focus in this session, "Physical Education, The Forgotten Aspect of Early Childhood Education"?

To briefly explore possible reasons for this question, it is important to return for a moment to the focus of the 1971 conference — the question of whether motor development was significant in the lives of young children and, if so, what this meant for physical education programs in early childhood.

Even before the 1971 conference, to me it was a "given" that developmental progress in movement control was significant in the child's overall development. To me it was also a "given" that motor development research was essential to the understanding of this developmental progress in movement control. It seemed obvious that all of this was necessary if we were to design meaningful and developmentally appropriate movement programs for young children. Apparently many of us at the end of the 1971 conference assumed that these beliefs were also "givens" for all conferees, and would magically be embraced by all physical and early childhood educators. We seemed to assume that just as magically these "given" beliefs would be put into action in early childhood programs.

Of course, it was not realistic to make such assumptions. For such assumptions to become reality: 1) beliefs about programs of physical education for young children had to be compatible with the developmental needs of the children; 2) motor development research had to grow in quantity and quality and such research had to be meaningfully communicated to the teachers and parents of young children; 3) physical and early childhood educators had to have adequate pre and inservice experience in quality movement programs for young children in preparation for developing such programs in their own schools.

While many of these requisites for progress in provision of developmentally appropriate physical education programs for young children were in action in a few schools and teacher preparation programs by 1971, there was much to be done before our assumptions could become dominant in action. Unfortunately, while considerable progress has been made since 1971, we are still far from realizing our hopes. I would like to explore possible reasons why this is so by looking at the three points I have just cited.

Physical Education and the Developmental Needs of Children

First, beliefs about programs of physical education had to be compatible with the developmental needs of children. This suggests

that programs had to be centered on the child, not on the activities to be taught. They had to be developmentally sound.

In reflecting on my own beliefs as I approached the 1971 conference, I became aware that my accepted "givens" in the 1970s had not always been clear to me. I had to run up against a personal "developmental" barrier, and having run up against this barrier, I then had to dare to make a switch in my orientation in physical education before these "givens" could fall into place.

The young child's development, especially motor development, has been an interest of mine throughout most of my career. Trying to better observe and describe the actual movement patterns of the child; to understand how these movement patterns change over time and why they change; to study the underlying processes which may explain the movement pattern changes has long been at the center of my work. In addition, I have been interested in applying motor development research knowledge in the development of quality physical education experiences for young children. But asking and seeking answers to such questions and challenges was not really where I started.

In the late 1950s and early 1960s, I looked back on several years of teaching "gym" to preschool and elementary aged children, and on attempts to teach physical education majors how to teach physical education to the young child. I had even moved out into the realm of conducting workshops for inservice teachers. Even though I was recognized as a successful physical education teacher, a growing and rather awesome realization began to catch up with me. This realization was that I really did not know very much at all about the phenomenon of the development of movement in the human being. I really did not know very much about what the child hopping, skipping, galloping, jumping, throwing, or catching really looked like in any detail.

I knew almost nothing about how these movements changed developmentally. I began to think that if I did not really know these things, I could not hope to observe children's movement and know where to start to help them become better movers. How did I know when they were ready for more complex movement challenges? I knew very little about how children felt about themselves as movers; about how they felt as they moved; about what they thought about the movement experiences I had designed for them. A host of other "If I do not know, how can I" questions crowded into my mind.

I suspect most of you cannot go back in memory with me to the physical education program patterns that dominated the 1940s and 50s, but let me sketch a bit of this for you.

I knew a lot about games, dances, stunts, tumbling, and individual and dual activities. I knew the rules and strategies for a fair number of

team sports. I knew a little about anatomy, physiology, and something called kinesiology, then more like applied anatomy than the current study of the dynamics of human motion. I knew a little bit about psychology and teaching methodology. I knew how to develop efficient squad formations, select squad leaders, take roll, and select equipment. I knew how to organize lists of games, dances, individual activities, etc., into 3, 4, or 5 week curriculum blocks, being careful to achieve a yearly balance among the needed categories of activities. I knew how to measure outcome or result information, such as how fast the child could run, how many feet the child could jump, or how many games the child could name. I had books that listed "faults" in the performance of particular movement skills required for playing the games, dances, and individualized activities I selected for the children. These faults were based on skill demands for success in the activity, usually using adult skilled performance as a model. They were not based on developmental readiness for meeting the demands of the skill.

As I reached my own developmental barrier as a teacher, I began to realize that such background had prepared me to teach activities, not children. If I really were teaching children, what was I doing centering my attention primarily on the activity to be taught rather than on the moving child? If I really wanted to contribute to the education of the child, what was I doing trying to fit all of the children I taught to the activities I chose, rather than observing the moving child and designing movement activities to fit the child's needs? How did I really know where a child was in developmental readiness to cope with the activities I had asked them to learn?

These were unsettling questions to say the least. I had a lot to ponder, a great deal to learn. I had substantial changes to make both in the physical education programs I designed for children, and in the methodology I used in working with children within these programs.

After 4 years as an undergraduate, and through several years of teaching, I had finally discovered the child as the center of my concern. The difficult question facing me then was how I could effectively change directions from activity-dominated programs which required the child to adjust to the development of the activity, to child-centered programs in which activities were designed to meet the needs of the developing child.

That I made the change has been evident in my writing and teaching (Halverson, 1966, 1971a, 1971b; Roberton & Halverson, 1984). That many others made that change also, or were fortunate to be taught by physical educators who had already made this shift, is evident in their writing. The following is only a small "starter" sample of Physical Education for Children references you may wish to consult for more infor-

mation: *Barrett, 1973; Gallahue, 1982; Graham, Holt/Hale & Parker, 1987; Logsdon, 1983; Riley, Barrett, Martinek, and Roberton, 1980.

That we have so many fine references is good news, and evidence of important progress made since 1971. That the prevailing pattern of physical education programs illustrated by my 1940s background is, however, still very much dominant in some form in the 1980s is, in my opinion, bad news. The reason for the continued popularity of the activity-centered adult modeled programs of the 1950s is hard for me to understand.

I suspect that a good deal of the reason why this can be true may be traced to the current culture with its stress on competitive sports; on the "we have to be number one" syndrome; on viewing fitness programs as synonymous with physical education, rather than a possible outcome of aspects of physical education programs; and on the assumption in our current society that the earlier a child can be "trained" in cognitive or motor development the better. In my opinion, this is bad news and it makes the road to the establishment of more developmentally appropriate programs for young children in physical education more difficult.

Motor Development Research Since 1971

In my introduction, I suggested that a second point in trying to move our dreams of 1971 to reality was that motor development research had to grow in quantity and quality and that such research had to be meaningfully communicated to teachers and parents of young children. What of our progress in this area?

Motor development research flourished in the 1930s, was then largely ignored for three decades as the interests of psychologists turned to quantitative assessment of human performance, and was rediscovered in the late 1960s. Researchers in developmental psychology, physical education, and physical therapy, among others, rediscovered the potential in developmental studies for understanding the changing movement of the human being. A new surge of interest in the young child again emerged. This early motor development information base was useful but sparse, and what little was available was limited in content.

* Throughout the paper, suggested "starter" reference lists are not meant to be comprehensive. In most instances there are also other good references available

Research in motor development still has a distance to go along the scholarship continuum, but we have made impressive progress since the 1971 conference. Clearly the surge of interest begun in the mid to late 1960s has resulted in high quality motor development research. This research has greatly strengthened our information base. It has built on that base; but at the same time the research has moved out in new directions in studying the underlying structures or developmental processes which could help us understand observed developmental change.

In the 1970s and 1980s a significant and necessary occurrence in our coming of age as scholars has been the emergence of increased numbers of serious motor development researchers. These researchers are well grounded in the study of developmental psychology, movement analysis, research skills and techniques, and in specialized allied areas such as neurophysiology or biomechanics for example. Yet, even with the emergence of more scholars in the area, there are still far too few. Roberton (in press) recently noted that we have only about 20 researchers who have published consistently (defined as at least one to two articles a year), and are working within a well defined research framework. Yet, in our American Alliance for Health, Physical Education, Recreation, and Dance Motor Development Academy alone, we have around 2,000 members interested in the application of motor development research to programs of physical education. Think of how many more educators and parents outside our organization are also interested in the research findings. Therefore, though we have made progress, we have great need for more scholars if we are to serve our field effectively.

A second significant and necessary occurrence in our coming of age as motor development scholars has been the emergence of motor development research programs with a line of inquiry growing out of solidly based frames of reference. Such research programs yield multiple studies, each building on the previous one. This is in contrast to early motor development research where, with the exception of the very early work of McGraw (1969,1945) and Gesell (1954), there were far too few studies resulting from this type of continuous inquiry work. Rather, the field of study in motor development until fairly recently was replete with single effort research. In our history, it appears that we were a restless group eager to find a question, to pursue it briefly, and then to go on to something different, leaving our single study findings dangling. It seemed that in our early history, physical educators lacked the discipline and the patience needed to pursue important leads in research that may have been lurking in our single try research.

A third significant and necessary occurrence has been the study of motor development by highly competent researchers approaching the study of underlying structures of developmental change from many different perspectives.

We are not just movement pattern describers anymore. While I will argue, of course, that detailed description of movement changes in the motor development of children is a necessary part of the total motor development research base, it has always been clear to me that it is not an end point, but only a beginning. Now, we have moved ahead to studies of how and why such observed movement changes do occur.

In the 1970s and 1980s systematic motor development research investigations have centered generally in three major categories. The first is the area of detailed description and validation of developmental movement sequences. The second is in the area of the study of immediate* environmental factors influencing motor development. The third is in the area of probing underlying structures and processes leading to the understanding and explanation of developmental changes. It is not my intent to review all of the current motor development research. Rather, I will discuss in fairly broad strokes, examples of research and possible applications for programs of physical education for young children in the first two categories; briefly introduce the third category, and finally suggest a few references that may be of help to the teacher of young children.

Inter- and Intra-Task Motor Development Sequences

The first category is systematic detailed movement description and validation of developmental movement sequences. Let me first define what I mean by the term "developmental movement sequences." In our book "Developing Children: Their Changing Movement," (Roberton & Halverson, 1984) we refer to inter-task and intra-task developmental sequences. Inter-task sequencing is defined as the ordering of motor tasks to the time when "primitive" forms of each task are observed to make their first appearance in a child's repertoire. For example, the familiar developmental order or motor "milestones" of standing before walking, walking before running, running before

* Refers to within a movement experience environment or component of that environment.

hopping, etc. is an example of inter-task sequencing.

Intra-task developmental sequences are defined as predictable movement changes within a single motor task. For example, you are familiar with the easily observable leg and arm action intra-task changes in walking. In primitive walking the leg action is characterized by short, wide steps with excessive leg lift due to flexion of the thigh at the hip. Little ankle action occurs and the steps are flat-footed. Later, flexion of the thigh at the hip decreases from what it was in the primitive walk. The stride becomes longer and not as "side-to-side" as it was earlier. The base of support narrows. Later, instead of a flat or nearly flat-footed landing, the heel strikes first in foot contact, and the body weight rides over the rest of foot.

In the early or primitive walk, the arms are usually held in what has been called a "high guard" position (Milani-Comparetti & Gidoni, 1967). This may be a protective readiness response in case of loss of balance. Later, the arms will be carried lower but still swinging very little, if at all. Later, they will swing out in opposition with the forward arm swing from the shoulders synchronized with the forward step of the opposite leg (Roberton, 1984).

While inter-task developmental sequencing can be of some help in tracing the developmental continuum of a child as he or she attains the primitive pattern milestones, it's use is somewhat limited for the researcher and the teacher interested in the progress of the child beyond the primitive pattern in motor tasks. McGraw (1969, 1945) noted this when she commented that the fact that a child sits before she or he creeps, creeps before he or she walks, and walks before she or he runs or skips, sets up an orderly sequence of events, but that it does not denote the course of movement changes in a particular activity. Nor does it reflect the underlying developmental processes. McGraw's method of detecting movement changes in motor tasks was through use of verbal description of motion pictures of youths moving. She recognized the importance of this type of information in following actual movement pattern changes within tasks, but the verbal description was primarily a means to an end. Of critical interest for McGraw was the study of underlying processes in development, and detailed movement description was an important part of her investigation of the underlying processes.

Picking up on McGraw's lead in her early research, the focus of a substantial portion of the motor development research in the 1970s and 1980s has focused on the discovery of intra-task motor sequences. While this progress is significant for many reasons, it is particularly of practical importance for teachers.

Detailed motor pattern change description and the detection of how within task movement changes are ordered allows us to really "see" the movement changes in the children we teach. It provides information that helps us know what to expect next in their development, and helps us know when we have helped or hindered children's developmental process with our teaching. It provides a basis for deciding how and when to intervene in our attempts to facilitate motor progress. The following references from our laboratory and from the work of others will provide more detailed information about intra-task developmental sequences: Branta, Haubenstricker, and Seefeldt, 1984; Roberton, 1984; Roberton & Halverson, 1984; Ridenour, 1978; Seefeldt & Haubenstricker, 1982.

Effects of Immediate Environment on Motor Development

The second research category in which motor development researchers have recently begun systematic investigations is that of immediate environmental factors influencing motor development. While we are beginning to make some progress in this area, surprisingly, even now, most information on the impact of immediate environmental factors on children's motor development is the result of incidental observations or one-study research. Currently, however, systematic research has been emerging in the work of Barnett, 1980; Barnett & Higgens, 1983; Herkowitz, 1978, 1980; Higgens, 1972; Higgens & Spaeth, 1972; Roberton, 1987, and others.

It appears that in the past we have most often brainstormed ideas about developmentally appropriate movement environments for children and then assumed that these ideas really do "work." While all good researchers and teachers must constantly brainstorm and dream up ways to facilitate change in the motor development of children, the process should not stop at the brainstorm stage. It is often a mistake to assume that our "arm chair" ideas, and even ideas recommended by experts do "work" with all children. I am not minimalizing the importance of the process of creating our own ideas or using those of others in our work. Rather, I am making a plea for careful observation of the result of these ideas in action. We have to check to see if they do facilitate the developmental progress in movement of the children with whom we are working. If not, we have to ask why, and go back to our creative "drawing board" in teaching. Let me give you some examples of immediate environment ideas that logically seemed to be good

ideas for promoting progress in motor pattern development in action. They seemed so, but they did not really work in the real world.

I had decided that if I used balls made of fairly soft material and in a size that would be appropriate for a young child's hands, success in catching should improve. So I used a ball a little smaller than a softball made of "nerf" type material. Tossing the ball on a fairly direct path and at a "catchable" speed for a young child, I was surprised to find that while hand contact was good, success in actual catching was not. Even children who had been catching bean bags from the same distance and with the same speed as the ball toss, were now dropping the ball. Why this was so is now very obvious to me, but if I had not carefully observed the effect on the movement of the children of this "logical" assumption of mine, I might not really have spotted the problem. The reason for lack of success in hanging on to the ball was that the material was too "bouncy." The children's hand grasping closure time was too slow for the soft, but "bouncy" ball. Consequently, the ball was out of the hand before the child could successfully grasp it.

In another example, it seemed logical that if children have problems tracking and striking rapidly moving balls, tossing at a very slow speed should enhance their success in striking. While waiting for the cameras to be reloaded, in one of our research filming sessions, I was playing ball with John. We were getting ready to film John in two-handed striking tasks. He was using a plastic bat short and light enough for his size. Using my "make the ball toss very slow so that John can hit it" logic, I picked up a soft, light-weighted ball about the size of a softball. I tossed the ball on a fairly direct path, but I kept it as slow as I possibly could and still maintain the trajectory. John continually began his swing too soon and missed the ball. After several failures (as viewed by him), his total frustration was rapidly approaching. I changed to a slightly heavier, but same-sized ball, and I increased the speed of the tossed ball to coincide with his swing timing. There was immediate success, loss of the frustration clouds, and continued "fun" practice. My *a priori* assumption that tossing the ball at a very slow rate would enhance John's striking success was not true. What is true is that young children have a hard time adjusting to objects moving too slowly. They cannot yet "hold back" their swing to time it with the arrival of a very slow moving object. They seem to have a preferred speed at first, and only later can begin to make timing adjustments to cope with objects moving at slower speeds. The work of K. Williams (1982) and Stadulis (1971) supports these observations.

As teachers, we should continue to be imaginative, creative, and to conduct our own informal, careful observations of the effect of our

environmental designs on children's developmental progress in movement. Observing the effect of immediate environment (what we say, what equipment we use, and how we design the movement experience) on the motor development is at the heart of teaching.

Much of our environmental research impact information has come from one-study research investigations. Though there is much more to be done by researchers in this area, the cumulative information from such studies does give some help to teachers in planning developmentally appropriate movement experiences for young children. The following "starter" references may be of help on such topics as the influence of equipment size, weight, and color; figure ground effects; and the effect of the speed/path of moving objects on movement patterns of children: Bruce, 1966; Bowers, 1988; Halverson, 1966, 1971a; Herkowitz, 1978, 1980; Morris, 1976; Ridenour, 1974, 1978.

Study of Underlying Processes in Motor Development

A third category of current research in motor development is that of studying underlying processes which might help us to better understand or explain motor developmental change. In the 1940s, neuro-maturation was accepted by a substantial number of motor development researchers as the explanation for observed developmental changes in movement. In fact, implicitly or explicitly, this may still be the dominant view held by many psychologists, educators, and parents. In the 1970s and 1980s, however, other views have emerged in motor development research. Of these, information processing theory is one that has received substantial attention.

To date, the most often studied areas within information processing have tended to be developmental differences in children's sensory, long-, and short-term memory store, and the rate or speed of information processing. Within the area of short and long term memory store, control processes such as encoding, rehearsal, search and retrieval, perceptual sensitivity, and attention have been studied using movement situations. Much of this type of research should be familiar to early childhood educators as it relates to cognitive development, but it may not be automatically transferred as also applicable to motor development. An extensive review of the work of motor developmentalists in this area is beyond the available space in this paper. I suggest the following "starter" references for those of you who are interested in more specific information for your work with the

movement experiences of young children: Clark, 1978; Haywood, 1986; Schmidt, 1982; Thomas, 1980, 1984; H. Williams, 1983.

It is clear from the work reported by these authors and others that the young child's ultimate motor developmental progress can be affected by teachers' and parents' sensitivity and skill in enhancing the information process development of the child in relation to movement experience. Movement play, self-practice in movement skills, and personal exploration of movement activities are important to the child as he or she discovers what is possible in the world of movement. However, knowledge about, and strategies for, coping with movement challenges do not automatically progress to the extent they could for all children. They must be enhanced within the physical education setting through well planned interventions by teachers, parents, and often older children.

While I am sure you may be able to come up with many illustrations of how we can enhance the child's movement progress by our recognition of his or her level of information processes development, let me share one or two.

Children are intrigued by bouncing balls. However, early in development, children are "moved" by the balls rather than "moving" the balls where they want them to go. Anticipating what to expect of a bouncing ball is not automatic for the young child. You may be familiar with what often happens when a young child attempts a "drop and catch game" with a bouncy ball. A very frequent occurrence is that the young child will drop the ball and then immediately flex at the hips to follow the ball down. The result most often is not only a "miss" on the catch but a "hit" in the chest or even the face as the rebounding ball collides with the bent-over child. In most cases, it takes some guidance for the child to "notice" that if the ball is dropped, it will bounce back up. It may also take some verbal rehearsal to help insure success as a "drop, wait, catch."

Children can easily perform a continuous series of self-chosen movements; that is, they can string together running, kicking a ball, chasing it, picking it up, sauntering around a bit carrying it, and so on. However, performing a requested, continuous series of movements is difficult for a young child. Suppose, for example, the requested series is something like "run to the big ball, pick it up, carry it to the box, drop it in the box, and then sit down in the circle." Telling young children what the series is and then asking them to do it will usually result in a great deal of confusion after the first task of "run to the big ball" has been accomplished. Showing them and then asking them to do it will usually result in the same amount of confusion. Guiding them through the sequence with verbal labelling of each part may be

somewhat more successful, especially if the teacher helps the child label and rehearse. Children do not automatically develop strategies for helping them recall a series of moves. They often need some help in developing strategies. My example is one of a series of unrelated tasks somewhat like the task of trying to recall nonsense syllables. Yet, all game play requires planning or remembering an appropriate series of movements. Thus, the movement series recall or planning challenge is a "real world" challenge. We as teachers have to learn to "see" various common movement series in game demands, for example, and to help the children develop strategies for meeting the movement challenges.

Currently, another process probing theory is that of dynamical systems. This is not an easily understood approach to the study of underlying developmental processes. It is also a much less familiar concept to us as teachers of young children than the first two I reviewed. To date, research in this approach is just beginning to emerge. Thus, there is little actual tested practical application teaching information available at this point. However, the work has promise for untangling some of the mysteries of the underlying processes in motor development. Consequently, for those who may be interested, I will briefly introduce the approach, taking much of this summary from a recent research report by Roberton and Halverson (1988). A Kugler, Kelso, and Turvey (1982) publication on "naturally developing systems" marked the introduction of this theory in motor development research. Based on principles from theoretical physics/mathematics and Gibson's (1979) ecological psychology, the theory proposes that qualitative (movement pattern) changes are an emergent property of the dynamics of the motor system. That is, increasing the energy input ("scaling up") to a given parameter, such as increasing movement speed, causes qualitative changes when a critical parameter value is reached, just as increasing temperature causes H^2O molecules to appear as ice, water, or steam.

The human neuroskeletal system has a large number of movement possibilities. That is, it is said to have a large number of "degrees of freedom." Trying to understand how these degrees of freedom are functionally organized is challenging and intriguing to the developmentalist. In dynamical systems theory, the concept of "coordinative structures" is a way of considering this problem. In dynamical systems theory, coordinative structures are essential units in the development of the motor system. They are defined as "temporary marshalling of many degrees of freedom into task-specific functional units (Kelso, Tuller, Valikiotis-Bateson, & Fowler, 1984, p. 828).

Dynamical systems theory suggests that the establishment of coordination within a skill would consist of the emergence and

integration of coordinative structures as the dynamics of the system changed with changing mass, length, and energy flow. Thus, the identification and tracking of coordinative structures is an important research step.

Clark and Whithall (in press) help us to understand what the dynamical systems approach means in the example of the problem facing an infant who wishes to change her location. They point out that when the infant is 2 months old, the solution to the problem may be much different than when she is 12 months old. In 10 months, there are changes in morphology, the central nervous system, and the muscular system in the infant that must be taken into account by the neuromuscular system if the movement goal is to be reached. To think that with each change, the nervous system must try to send out new specific "commands" to each muscle group has little credibility. Thus, trying to detect possible stability and change in coordinative structures holds out substantial promise for unlocking some of the mysteries of how development "happens."

Communicating Motor Development Research to Teachers

It is clear that since the 1971 conference, there has been a substantial increase in the quantity and quality of motor development research. This part of the story is very encouraging, but clearly, if such information is to affect the lives of young children, it must be used. How are we doing in this area of effectively communicating motor development research findings to teachers?

In answer to that question, the news is both good and bad. The bad news is that current motor development findings have barely dented current child development texts. In a number of recent child development references published in the past 8 years, motor development information ranges from 0 to approximately 2 to 3 pages in most of the texts and a maximum of 9 in one text. The information included is typically mixed with growth information as if motor development and growth are synonymous. In general the little motor development information included in these texts of the 1980s, is still based primarily on the early motor development research of the 1930s and 1940s. There is amazingly little attention given to any of the 1970-1988 research. What this suggests is that we obviously have not reached the educational and developmental psychologists who write these texts; or if we have, motor development information is not

considered essential or important, or they have not bothered to do thorough and updated literature reviews. If physical education has been the forgotten aspect of early childhood education, certainly, motor development research has been the forgotten or ignored field by child development textbook writers. Yet, most physical and early childhood teachers must take at least one course in which these texts will be the central requirement.

The good news, however, is that the post-1971 surge of interest and action in motor development has resulted in the production of mor than 12 motor development texts; an increase in the amount of motor development information included in current texts on physical education for preschool and elementary aged children; and increased, but still somewhat sparse current motor development information included in some early childhood program and methodology texts.

This good news reflects progress in providing motor development information for teachers of young children, but we still have a distance to go in effectively communicating what we know about motor development. Textbook writers, teachers of teachers, and workshop leaders all face a significant challenge in the 1990s. We mean well, but we are still leaving a very large gap in the guides we develop for fledgling teachers of children. For example, we spend pages and pages listing the details of developmental movement sequences, but we are still weak in developing ways for the teacher to go from reading about such developmental changes to the next step of actually learning to "see" movement. We have not yet really faced up to the amount of time and effort that is necessary for teachers to become keen observers of the moving child. Even when the effort and time is given for teachers to have a chance to become skilled movement observers, we have failed to develop adequate meaningful help in our writings to aid the teachers to develop into keen interpreters of what they are seeing in the movement. Unless the teacher can see, and interpret what is seen, the necessary step of deciding when and how to intervene to facilitate developmental progress for a child is difficult, if not impossible. What I am suggesting is not easy. We have made progress in this area since 1971. My sense, however, is that we know more than we have effectively communicated to the teachers we need to help.

InService and PreService Experience

Inservice and preservice physical and early childhood education teachers must have substantial observation, assisting, and student teaching experience in quality movement programs in preparation for

developing such programs in their own schools. This requisite for accomplishing our dreams of 1971 is one of our greatest challenges in the 1990s. The other requisites I have discussed might be "do-able" by a relatively small number of writers and researchers, but this task of providing guided experience in movement programs for children impacts on the work of all teachers of teachers and teachers of young children. The developing child is an incredibly complicated being. To facilitate maximum developmental progress in the cognitive, social, emotional, and motor development of the individual young child is an awesome task. Any honest educator knows that it is really an unattainable goal. We can, however, get closer than we have in the past.

This 1988 conference was an important beginning in the attempt to meet the 1990 challenge for all physical and early educators. What we shared, and most importantly, how we take what we believe about the significance of motor development of young children into action, will reflect what we value in designing their physical education programs. It is our hope that developmentally appropriate programs will quickly become the dominant model in our work and will quickly supplant out-moded developmentally inappropriate activity-centered models, and that child-centered, developmentally based physical education programs will be the "remembered," not the "forgotten," aspect of early childhood education.

References

Barnett, B. (1980). Movement organization as reflected in the jumping patterns of young children in different environmental contexts. *Proceedings of the Research Section, National Convention of the American Alliance for Health, Physical Education, Recreation and Dance* 39. Detroit, Michigan. (Abstract).

Barnett, B., & Higgens, J. R. (1983). The effect of environmental and optic field flow changes on the organization of movements by children. American Alliance for Health, Physical Education, Recreation and Dance 98, Minneapolis, Minnesota. (Abstract).

Barrett, K. R. (1973). I wish I could fly — A philosophy in motion. In P. Leply, & R. A. Cobb, (Eds.), *Contemporary philosophers in physical education and athletics*. Columbus, Ohio: Charles E. Merrill.

Bowers, L. (1988). Children need playgrounds—But playgrounds need help. *Journal of Physical Education & Recreation*, 59, 47-51.

Branta, G., Haubenstricker, J., & Seefeldt, V. (1984). Age changes in motor skills during childhood and adolescence. In R. L. Terjung

(Ed.) *Exercise and sport science reviews*, 12, 457-520. Lexington, Maine: Collamore Press.

Bruce, R. (1966). The effects of variations in ball trajectory upon the catching performance of elementary school children. (Doctoral dissertation University of Wisconsin - Madison, Dissertation). *Dissertation Abstracts International, 28*, 480A.

Clark, J. E. (1982). Developmental differences in response processing. *Journal of Motor Behavior, 14*, 247-254.

Clark, J. E. & Whitall, J. (In press). Changing patterns of locomotion from walking to skipping. In M. Woollacott & A. Shumway-Cook, (Eds.), *A development of posture and gait across the lifespan*. Columbia, South Carolina: University of South Carolina Press.

Gallahue, D. (1982). *Developmental movement experiences for children*. New York: Wiley.

Gesell, A. (1954). The ontogenesis of infant behavior. In L. Carmichael (Ed.), *Manual of child psychology*. (2nd ed.). New York: Wiley.

Gibson, J. J. (1979). *An ecological approach to visual perception*. Boston: Houghton Mifflin.

Graham, G., Holt/Hale, S., & Parker, M. (1987). *Children moving: A teachers guide to developing a successful physical education program*. (2nd ed.). Palo Alto, California: Mayfield.

Halverson, L. E. (1966). Development of motor patterns in children. *Quest*, 6, 44-53.

Halverson, L. E. (1971a). The young child—The significance of motor development. In G. Engstrom, (Ed.), *The significance of the young child's motor development*, 17-32.

Proceedings of the conference sponsored by the American Association for Health, Physical Education and Recreation, and the National Association for the Education of Young Children: Washington, D.C.

Halverson, L. E. (1971b). A look at the pre-school child. *Journal of Health, Physical Education and Recreation, 42*, 31-35.

Halverson, L. E. & Roberton, M. A. (1979). The effects of instruction on overhand throwing development in children. In K. Newell & G. Roberts (Eds.), *Psychology of motor behavior and sport*—1978, 258-269. Champaign, Illinois: Human Kinetics.

Haywood, K. (1986). *Lifespan Motor Development*. Champaign, Illinois: Human Kinetics.

Herkowitz, J. (1978). Developmental task analysis: The design of movement experiences and evaluation of motor development status. In M. Ridenour (Ed.), *Motor development: Issues and applications*, 139-164. Princeton, New Jersey: Princeton Book Company.

Herkowitz, J., (1984). Developmentally engineered equipment and playgrounds. In J. Thomas (Eds.). *Movement development during*

childhood and adolescence, 139-173. Minneapolis: Burgess.

Higgens, J. R. (1972). Movement to match environmental demands. *Research Quarterly, 43*, 313-336.

Higgens, J. R., & Spaeth, R. (1972). Relationship between consistency of movement and environmental condition. *Quest,17*, 61-69.

Kelso, J. A. S., Tuller, B., Vatikiotis-Bateson, E., & Fowler, C. (1984). Functionally specific articulatory cooperation following jaw perturbations during speech. Evidence for coordinative structures. *Journal of Experimental Psychology: Human Perception and Performance, 10*, 812-832.

Kugler, P., Kelso, J. A. S., & Turvey, M. (1982). On the control and coordination of naturally developing systems. In J. A. S. Kelso & J. E. Clark (Eds.), *The development of movement and coordination*, 5-78. New York: Wiley.

Logsdon, B., Ammons, M., Barrett, K., Broer, M., Halverson, L., McGee, & Roberton, M. A. (1984). *Physical education for children: A focus on the teaching process*. (2nd ed.). Philadelphia: Lea & Febiger.

McGraw, M. (1969). *The neuromuscular maturation of the human infant*. New York: Hafner. (Original work published in 1945).

Milani Comparetti, A. & Gidoni, E. (1967). Routine developmental examination in normal and retarded children. *Developmental Medicine and Child Neurology, 9*, 631-638.

Morris, G. D. (1976). Effects a ball and background color have upon the catching performance of elementary school children. *Research Quarterly for Exercise and Sport, 47*, 409-416.

Ridenour, M. (1974). Influence of object size, speed, and direction on the perception of a movement object. *Research Quarterly for Exercise and Sport, 45*, 193-301.

Ridenour, M. (1978). Programs to optimize infant motor development. In M. Ridenour (Ed.) . . . *Motor Development: Issues and Applications*, 39-61. Princeton Book Co: Princeton, New Jersey.

Riley, M., Barrett, K., Martinek, T., & Roberton, M. A. (1980). *Children and youth in action: Physical activities and sports*, U.S. Government Printing Office: Washington, D.C.

Roberton, M. A. (1984). Changing motor patterns in childhood. In J. Thomas (Ed.), *Motor development during childhood and adolescence*, 48-90. Minneapolis: Burgess.

Roberton, M. A. (1987). Developmental level as a function of the immediate environment. In J. E. Clark & J. Humphrey (Eds.), *Advances in motor development research*, 1-15. New York: ANS Press.

Roberton, M. A. (In press). Future Directions in Motor Development Research: Applied Aspects. In J. Skinner (Ed.), *Future directions in exercise/sport research*. Champaign, Illinois: Human Kinetics.

Roberton, M. A., & Halverson, L. (1984). *Developing children: Their changing movement: A guide for teachers.* Philadelphia: Lea & Febiger.

Roberton, M. A. & Halverson, L. (1988). The development of locomotor coordination: Longitudinal change and variance. *Journal of Motor Behavior, 20,* 197-241.

Schmidt, R. (1982). *Motor control and learning: A behavioral emphasis.* Champaign, Illinois: Human Kinetics Publishers, Inc.

Seefeldt, V., & Haubenstricker, J. (1982). Patterns, phases, or stages: An analytical model for the study of developmental movement. In J. A. S. Kelso and J. E. Clark (Ed.), *The development of movement control and coordination.* New York: John Wiley & Sons.

Stadulis, R. (1971). Coincident anticipation behavior of children. Doctoral dissertation, Columbia University.

Thomas, J. R., (1980). Acquisition of motor skills: Information processing differences between children and adults. *Research Quarterly for Exercise and Sport,* 51, 158-173.

Thomas, J. R., Thomas K., Lee, A., Testeran, E., & Ashy, M. (1983). Age differences in use of strategy for recall of movement in a large scale environment. *Research Quarterly for Exercise and Sport, 54,* 264-272.

Whitehurst, K. (1971). The young child: What movement means to him. In G. Engstrom (Ed.), *The significance of the young child's motor development,* 51-55. Proceedings of a conference sponsored by the American Association for Health, Physical Education and Recreation, and the National Association for the Education of Young Children. Washington, D.C.

Williams, H. (1983). *Perceptual and motor development.* Englewood Cliffs, New Jersey: Prentice-Hall.

Williams, K. (1982). Age differences in performances of a coincident anticipation task. Application of a modified information processing model (Doctoral dissertation, University of Wisconsin-Madison) *Dissertation Abstracts International, 43,* 1471A.

Chapter 11

A Dynamical Systems Approach to Motor Development: Applying New Theory to Practice

Jill Whitall

A recently evolving dynamical systems perspective on motor behavior has emerged as a viable alternative to traditional views on how we acquire motor skills. One early view was based on neuromaturation and emphasized the readiness of the nervous system for skill acquisition. This belief implied little need for teacher/parent intervention. A more recent view, the information processing perspective, emphasizes the conscious attention and cognition required to build up a motor memory of skills. This kind of thinking has led to an emphasis on verbal/visual instruction and feedback.

Proponents of the dynamical systems perspective challenge both of these earlier views of skill acquisition by suggesting that dynamical factors (i.e. universal laws of motion) are important in determining whether a child is ready to produce a movement and in how that movement is produced. In brief, they argue that movements are shaped by a variety of body, task, and environmental factors and not by specific prescriptions from the central nervous system. Fundamental to this perspective is the difference between the coordination or form of skill (e.g., the segmental of a throw) and the control or regulation of a skill (e.g., the velocity or force of a throw).

The implications of this dynamical systems perspective to practice are many. For example, if the emergence of a motor skill is not solely a function of neuromaturation, then it is incumbent for those of us concerned with motor development to be aware of which sub-systems

are probable rate-limiters and how they can be manipulated to promote successful motor development. One obvious strategy, in this regard, is the scaling of equipment to body size. A second implication is to recognize the coordination/control distinction and to teach to *both* aspects of a skill rather than ignoring one or the other. To aid in this endeavor, it is suggested that the setting of tasks to elicit a specific goal (relative to coordination or control) is preferable to spending time in copious verbal/visual instruction. The young child is not readily able to "talk" to her nervous system and excessive cognitive attention may hinder the emergence and/or refinement of a particular skill.

The purpose of this paper, then, is two-fold: (a) to describe the dynamical systems perspective and contrast it with traditional views on motor development and (b) to discuss the implications of this contemporary perspective in terms of interventions by teachers/parents/caregivers. With recent interest in promoting advanced cognitive and socio-emotional development in infants, it is timely to consider the practicality of promoting advanced motor development. We need to know what can and what cannot be achieved by positive intervention.

References

Clark, J.E., & Whitall, J. (in press). Changing patterns of locomotion: From walking to skipping. In M. Woollacott & A. Shumway-Cook, (Eds.), *Development of posture and gait across the lifespan*. Columbia, S.C.: University of South Carolina Press.

Thelen, E., Kelso, J.A.S., & Fogel, A. (1987). Self-organizing systems and infant motor development. *Developmental Review, 7*, 39-65.

Chapter 12

Observing and Facilitating Skill Sequencing

By V. Gregory Payne

As educators most of us are familiar with Bloom's Taxonomy of Educational Objectives (Bloom, 1956). This was a means that Bloom devised to categorize educational objectives. His system has been widely employed, espoused, and studied in the years since its origin. In his taxonomy, Bloom suggested that all educational objectives could be grouped into three major areas or "domains," cognitive, affective, and psychomotor. The cognitive domain was used to group all objectives concerned primarily with the intellect. So, any objectives pertaining to such things as a child pondering the proper spelling of a word or the solution to a match problem would fall within this domain. The affective domain, often referred to as the social-emotional domain, includes all objectives relating to the child socially and emotionally. In this domain we are concerned with how our students feel about each other, how they act upon those feelings, and how they feel about themselves. The last domain, the psychomotor, is most important for my purposes in this paper, since it involves the child's movement. In this domain we are concerned with movement behaviors such as the techniques children employ in fine movements like handwriting and gross movements like running.

The Interaction Between Domains

Bloom's taxonomy has been widely accepted and utilized for its original purpose of categorizing educational objectives. As one who studies human development across the lifespan, I also find his three

major domains useful for categorizing subject matter within the development courses I teach. This approach leads to a logical organization which is easily comprehended by students. But, despite the organizational facility gained by using Bloom's domains, the system often leads to an unreal interpretation of development. My students begin to imagine the human being "clicking" in and out of a domain of behavior depending upon whether the behavior in question is spelling a word, socially interacting, or hopping on one foot. For that reason, I need to emphasize the point that human beings continually function in all domains all of the time. Imagine taking a written test. Most of us would categorize this task in the cognitive domain, but much more is really happening. We are functioning cognitively as we ponder the possible answers to a test question, but we also employ psychomotor skill as we write our answers. Simultaneously we are affected socially-emotionally since our feelings about ourselves and others affect our self-esteem which, in turn, affects cognitive performance. So, while using the three domains to categorize is useful in developmental studies, we cannot overlook the continual interaction between all domains of human behavior.

The Value of Movement in the Developmental Process

Careful examination of this continual, reciprocal, relationship between domains leads to recognition of the integral role that human movement plays in development in general. Human movement affects our cognitive and social-emotional processes while being reciprocally facilitated or inhibited by those domains. Generally, the more successful we are in movement, the more successful we can be in many other aspects of our lives. According to Flinchum (1988):

> "Movement activities can enhance cognitive potential, perception, memory retrieval, and language arts....Furthermore, the child's self-concept may be improved through mastery of self-act goals...basic to a positive self-concept." (p. 62)

The benefits of enhanced movement skill are clearly pervasive. However, most children do not achieve mature levels of movement skill without quality instruction. Quality instruction requires the creation of ability-appropriate movement experiences. Understanding the developmental sequence of movement skill acquisition evidenced by most children is necessary to design these ability-appropriate

experiences. Though all children develop movement skills at varying rates, their sequence of development is remarkably similar. Since understanding this sequence is imperative to the development of ability-appropriate movement activities it is worthy of more in-depth examination.

The General Sequence of Gross Motor Development

The general sequence of gross motor development evolves in a series of relatively well established steps. The first phase of movement is noticeable during the prenatal state and endures through approximately one year of life (Gallahue, 1982). This phase is characterized by involuntary movements known as infant reflexes. These reflexes occur as a result of the application of a stimulus. For example, when a stimulating object touches the palm of the hand, the fingers close creating a palmar grasp reflex. Like all reflexes, the palmar grasp is subcortical, which means the electrical impulse initiating the movement is processed below the level of the higher brain centers. Thus, reflexes are involuntary and are believed to be critical to the development of more advanced voluntary movements. In normal conditions all infant reflexes will "disappear" by approximately the first birthday (Payne, 1985a; Payne & Isaacs, 1987).

The second general phase of gross motor development overlaps the first as it begins at approximately birth and persists until about 2 years of age (Gallahue, 1982). This second phase is often referred to as the rudimentary phase of motor development (Gallahue, 1982; Zaichowsky, Zaichowsky, & Martinek, 1980). This name is used because the movements of this phase are the rudiments of future movement forms. The major distinction between movements in this and the previous phase is that these movements are voluntary. They are created via an electrical impulse that has been processed in the higher brain centers. There are generally believed to be three categories of movement in this phase of development: postural control, locomotion, and manual control (Keogh & Sugden, 1985). Postural control involves efforts to achieve a desired position of the body or body parts. For example, one of the first rudimentary movements evidenced in this category is head control; the baby raises the head when in a prone position. More advanced examples of postural control include positioning the body appropriately to enable crawling or, eventually, attaining upright posture to facilitate walking.

Crawling and creeping are examples of the second category of rudimentary movement, locomotion. The locomotion category includes all movements occurring at this age which are designed to transport the body from one point in space to another.

The last of three categories, manipulation, involves voluntary use of the hands. This includes the progression of movements leading to the mature forms of reaching, grasping, and releasing.

All three forms of movement in the rudimentary phase of gross motor development are integral to the development of the movements in the next general phase, the fundamental movement phase. This phase endures from approximately 2-7 years of age (Gallahue, 1982). These movements are particularly important to anyone involved in the instruction of movement skill to young children since children are often undergoing this phase of development upon beginning preschool or kindergarten. The movements are also important because when they are developed to a relatively mature level they can be varied and combined to create a variety of more advanced movements. Movements which are considered fundamental patterns are: walking, running, throwing, catching, jumping, striking, and kicking. Some experts also consider hopping, skipping, galloping, and sliding to be fundamental movements. The importance of all of these gross movements cannot be overemphasized since, as previously mentioned, when combined or varied, new movements are created. Jumping can be varied to create hopping. Hopping can be combined with walking or running to form skipping. We can also form virtually any dance or sport with fundamental movements. Basketball, for example, is running, jumping, shooting and passing (variations of throwing), catching and rebounding (a variation of catching combined with jumping, etc.). These more advanced motor forms of motor development become increasingly evident in the next general phase of development. However, from 2-7 years of age, instruction in the fundamental movement patterns should be prominent in educational programs intended to improve the movement skill of young children.

Though general gross motor development can be further subdivided into many more phases, for the purpose of this paper on early childhood, we will generalize to one last phase. This last phase involves the combination or variation of the fundamental movement patterns to create a sports skill phase. This phase often begins at approximately 7 years of age and lasts until the end of childhood or the beginning of adolescence (Gallahue, 1982). It is characterized by the newly created movements we discussed above. Also characteristic of this phase are children seeking opportunities to be involved in games or movement activities with their peers. Increasing levels of

importance on social interaction is emphasized while perfection of movement skill is initially downplayed. At the beginning of this phase children are generally willing to participate in a wide variety of movement activities since favorites have yet to be determined. However, by the end of the phase they will have selected certain activities that have become favorites and will begin participating exclusively in these activities. In addition, they increase their interest in perfecting movement. For some children, moving well will become a major reason for involvement in movement activities by the end of childhood or during early adolescence.

Sequences Within Fundamental Movement Patterns

Now that we have seen that there is a predictable sequence of general movement behavior, a closer examination of one particular phase of movement is warranted. As we said earlier, for the purpose of teaching, the fundamental movement patterns phase of development is particularly important. It generally occurs at the onset of our formal education and the movements emphasized in the phase can create a vast repertoire of more advanced movements when they are varied and combined. Interestingly, each fundamental movement pattern is fairly predictable in the way its characteristics evolve within children. So, there are specific sequences of development within the general sequence we discussed earlier. The characteristics of the specific sequences of the fundamental motor patterns are important to understand in teaching/learning situations. Teachers must be able to ascertain the level of movement skill students are exhibiting so they can determine the next step in the instructional sequence.

As an example of a sequence of development within a fundamental motor pattern we will examine throwing. Throwing, in its initial forms, is dominated by use of the arm. The child often stands erect, displays no movement of the legs or trunk, and simply flexes the elbow to raise the projectile to the shoulder. The arm is then immediately extended, pushing the object away from the body. The thrower faces the target at all times and the feet remain stationary throughout. The arm's motion, in this immature form, is abruptly terminated upon release of the object; there is no follow-through. In addition, children exhibiting immature characteristics often throw with either hand since hand preference has yet to be developed for throwing.

An intermediate level of throwing ability would be considerably different. The child may take a step to increase the force that can be generated for the projection. Initially, the step would be extremely small and might be a homolateral step, a step taken with the foot on the same side of the body as the throwing arm. However, with proper instruction and practice the child will exhibit a contralateral step, a step with the foot opposite the throwing arm. The intermediate level thrower would also show much greater preparation of the arm than the immature thrower as the arm is drawn back behind the head rather than simply up to the shoulder. She may also rotate slightly at the waist to enable the arm to be drawn back further behind the head. As the arm is whipped through, more follow-through will be demonstrated than was achieved in the immature form.

In the mature form of throwing, a clear contralateral step is taken. The arm is prepared well behind the head and is assisted by a considerable rotation of the upper body. This process is immediately reversed whipping the arm through as the body rotates around rapidly to assist the arm and create greater force for the projection. Immediately before the release of the projectile, the wrist "snaps" to further increase force. Subsequent to the release the thrower allows the arm's motion to naturally diminish. Thus, the arm continues down and may finish in a diagonal position across the body, resting against the hips and upper leg; a complete follow-through will occur (Payne, 1985b).

We should note that, though the sequence of acquisition of these characteristics is predictable, intra-individual differences will occur. For example, a child may exhibit a mature step but still evidence an intermediate level of arm preparation. In addition, teachers need to remember that children will only exhibit mature characteristics when asked to demonstrate maximal, or near maximal, efforts. For example, when asked to toss a whiffle ball a distance of 5 feet, the most capable of throwers will exhibit immature characteristics because more mature levels are unnecessary. We do not need a full contralateral step, upper body rotation, full preparation of the throwing arm, and a follow-through to toss such a light ball this short distance. However, when asked to toss the ball "as far as possible" or "vigorously against a wall," children should demonstrate mature characteristics if they are presently capable of that level of performance. So, if care is not taken, the child's apparent inability to perform maturely may be a function of inappropriate "demands" placed on the child by the teacher.

More detailed descriptions of the characteristics of each stage in the sequence of throwing, as well as the other fundamental movement patterns, can be found in most motor development and many

elementary physical education texts. Our purpose here is not to provide an exhaustive description of all of these characteristics, but to inform as to the existence of this relatively predictable sequence of specific characteristics of movement. As mentioned, understanding these sequences and knowing the characteristics of each step in the sequence is critical to the creation of ability-appropriate movement activities in teaching/learning. How can we have ability-appropriate activities if we do not know the level of ability of our students?

Developmental Task Analyses and Task Complexity Charts

Being able to assess students' level of ability in fundamental movement patterns helps us determine if they are ready for exposure to a more complex movement task, but more is necessary. As in most of education, we teach movement by progressing from the simple to the complex. Unfortunately, ascertaining which of several skills is next in the sequence of simple to complex is not always an easy task. Teaching a child to jump rope is an example. At some point in this teaching progression we need to decide whether to first introduce the task of jumping rope with the jumper turning the rope or with two helpers turning the rope for the jumper. Which comes first in the sequence of simple to complex? Certainly there are advantages and disadvantages to each. For example, when the jumper turns the rope, he is imposing the rhythm. In other words, he jumps at his own speed. However, he also coordinates the arm movements with the movement of his legs. If the rope is turned for the jumper the rhythm is externally imposed; he jumps at the speed determined by the helpers. However, his arms are now relieved of the responsibility of turning the rope. So, which condition is generally simpler for most children? Though most experienced teachers would suggest the second condition, we are relegated to making our best guess.

By utilizing what Morris (1980) refers to as "task complexity charts" developed by a process known as developmental task analysis, we can reduce the need for guess work and use information based on research and the knowledge of experienced professionals. In this process we examine the factors that affect each fundamental motor pattern and establish a simple to complex sequence for each factor. Fortunately, authors like Morris (1980), and Schurr (1980) have created many of these task complexity charts for us. So, by assessing our students' levels of ability in fundamental movement and consulting these charts

we can determine the next logical step in the simple to complex sequence for a given factor affecting a fundamental motor pattern.

For example some factors affecting throwing are size, weight, and shape of the projectile, and the location, size, and relative position of the target. Using those affecting variables we would create the following task complexity chart for throwing.

PROJECTILE

Size	Weight	Shape
Simple Small	Moderately Light	Round
Moderate	Moderately Heavy	
Complex Large	Moderate	Oblong

CHARACTERISTICS OF TARGET

Location	Size	Angle from Thrower
Simple Stationary	Large	Straight Ahead
Moving Slowly	Moderate	Left of Thrower
Complex Moving Fast	Small	Right of Thrower

As you can see, the task complexity chart answers many of the questions concerning the simple to complex sequencing of skills. This is useful for creating a wide variety of ability appropriate movement activities. To make increasingly complex movement activities, the factors affecting the fundamental movement pattern can be combined. For example, the distance of the throwing target can be increased while the size of the target is decreased. Beyond that, various fundamental movement patterns can be combined. For example, throwing could be combined with running so the child is required to throw while running. We would then simultaneously examine the factors affecting both of those fundamental movement patterns.

The use of developmental task analyses is more thoroughly discussed by Marcella Ridenour (1978) in a chapter entitled "Developmental Task Analysis: The Design of Movement Experiences and Evaluation of Motor Development Status." (p. 139). In that chapter Ridenour also presents task complexity charts for several fundamental motor patterns.

Summary

All human behavior is interlinked. Though Bloom (1956) separated the domains of human behavior into the cognitive, the affective, and the psychomotor, we constantly function in all domains all of the time. Therefore, improving behaviors in any one domain is likely to facilitate behavior in all others. This is particularly true for improving the quality of movement behavior which has been shown to have dramatic effects on such things as intellectual function and self-esteem. Most children, however, need quality instruction to improve optimally in movement skill. Quality instruction includes the creation of ability-appropriate movement activities. To determine what is ability-appropriate, the teacher must be able to assess the child's level of ability while knowing simple to complex sequences of the movement skills to be taught. More specifically, this requires the teacher to know and understand the movement characteristics expected for children at various levels of movement ability. To determine the simple to complex sequence of fundamental movement patterns, the use of developmental task analyses or task complexity charts are strongly recommended.

References

Bloom, B. S. (1956). *Taxonomy of educational objectives: Handbook I: Cognitive domain*. New York: McKay.

Flinchum, B. M. (1988, September). Early childhood movement programs: Preparing teachers for tomorrow. *Journal of Physical Education, Recreation, and Dance*, 62-69.

Gallahue, D. L. (1982). *Understanding motor development in children*. New York: John Wiley.

Keogh, J., & Sugden, D. (1985). *Movement skill development*. New York: MacMillan.

Payne, V. G. (1985a). *Infant reflexes in human motor development* (videotape). Evanston, IL: Journal Films.

Payne, V. G. (1985b). *Teaching elementary physical education: Recognizing stages of the fundamental movement patterns* (videotape). Northbrook: Hubbard Scientific Publications.

Payne, V. G., & Isaacs, L. D. (1987). *Human motor development: A lifespan approach*. Mountain View: Mayfield Publishing.

Ridenour, M. V. (1978). Developmental task analysis: The design of movement experiences and evaluation of motor development status.

In M. V. Ridenour (Ed.), *Motor development: Issues and applications*, 139-164. Princeton, NJ: Princeton Book Co.

Schurr, E. L. (1980). *Movement experiences for children: A humanistic approach to elementary school physical education*. Englewood Cliffs, NJ: Prentice-Hall.

Zaichowsky, L. D., Zaichowsky, L. B., & Martinek, T. J. (1980). *Growth and development: The child and physical activity*. St. Louis: Mosby.

Chapter 13

Developmentally Appropriate Movement Activities for Young Children

Dr. Andrea Boucher

This paper focuses on movement programs for children ages 3-6 years. The movement content of the conference was taken from the Educational Gymnastics and Developmental Games Skills areas of the physical education program. No creative dance was demonstrated. Teaching methods for these young children were demonstrated and a variety of developmentally appropriate apparatus and small equipment was used in the demonstration.

About the Children

The group of 24 children used for the demonstration were mostly 3-, 4-, and 5-year olds who were enrolled at the campus school, Lida Lee Learning Resources Center, at Towson State University, Baltimore, Maryland. Students in Early Childhood Education, under my guidance, regularly teach these children twice each week with each class lasting approximately 35 minutes.

About the Teaching Method

Methods of teaching which allow for young children to be creative with their bodies are to be encouraged. This also means allowing

children the opportunity to discover ways of moving for themselves as opposed to the teacher telling them how to move or the teacher demonstrating one way to do a certain movement. The teacher, using skillful questioning techniques, needs to be able to guide the movement discoveries of young children as they explore and investigate their environment. Given an environment rich in apparatus of different kinds, young children will spontaneously produce interesting and skillful movements as they negotiate the different spaces and places they can go. This is particularly so if the teacher encourages children to work at their own level of ability. In order for all young movers to be successful, and to gain in self-confidence, the teaching method chosen must allow freedom and choice for the children.

With 3 year old children the emphasis needs to be on free exploration with occasional limits or suggestions being given as the child asks for them or responds positively to them. Such freedom allows for a variety of physical activities to be attempted and explored as children concentrate on the things that interest them most. Generally these are movements they enjoy doing, movements which challenge their physical skills and inventive powers, or perhaps they are attempting to improve or make the movements they are working on at any one point in time more difficult for themselves. Young children enjoy challenging themselves, and generally when they do so it is both developmentally appropriate as well as safe.

About the Movement Content

A selection of movement tasks/activities were presented to demonstrate what types of movement skills can be illicited from children 3-5 years. Below are some sample tasks which can be used by teachers who are interested in experimenting with a creative approach to movement teaching.

Sample Movement Tasks/Activities for 3-Year Olds

The following types of educational gymnastics and games skill activities can be done either indoors or outside in an appropriate play space.

Educational Gymnastic-type Tasks (3-Year Olds)

"Show me what you can do with..."

"Where can you go on..."

"Try to do lots of different things with your body on all these pieces of apparatus."

"Find some places to jump down."

"Where can you make your body hang and swing?"

"Climb on all the pieces of apparatus, without letting your feet touch the ground."

"Find some places where you can be upside-down."

Developmental Games Skills-type Tasks (3-Year Olds)

"We have many different kinds of balls, big ones, little ones, plastic ones, rubber ones. Try them out. See what you can do with them."

"Can you make your ball bounce?"

"See if you can kick your ball."

"Try to throw your ball against the wall and catch it or stop it when it comes back."

"Look at all the things we have here with which you can hit a ball! Come and try some of these hitting implements and see all the different kinds of hits you can do."

The teacher's role in this type of teaching method is to observe the variety and quality of the children's movement; to ask questions which will encourage young children to make new discoveries; to make praising and supportive comments about the movements the children decide to try; or to ask questions which encourage young children to expand the variety and breadth of movements in their movement vocabularies such as:

"How can you do that a different way?" or

"Can you find another way to...?" or

"What other piece of apparatus/equipment could you use to...?"

Such general questions, when used frequently, encourage young children to prolong their movement activity as they try different types of movements on different pieces of climbing/hanging/swinging/balancing apparatus, or with different sizes/shapes/weights/lengths of games and sports equipment.

Sample Movement Tasks/Activities for 4-, 5-, and 6-Year Olds

When children reach 4 years old, they are usually able to work in a small group for a movement lesson. However if the children are immature, or if this is their first group experience, the teacher may experience difficulties when trying to do a group lesson. At this age it is still very important to recognize the individual differences among children in both their movement abilities and their fitness levels. Some children are extremely skillful and fit, particularly if their parents have encouraged them to move and use their bodies since birth. Others watch too much TV or are not active enough. Still others are told not to get dirty, which amounts to almost the same thing to the young child, who is by nature a sensory-motor being or a 'mover.' The overweight young child is of great concern. As educators, we must be sure to motivate these children to make them want to move.

The tasks for children at this level can begin to use more limitations. I refer to this as the limitation method of teaching. The teacher can give a few, or many, limitations. This depends on the movement experience of the children. The limitations can focus on many different variables which affect the way children move, including the part of the body which is to be used, the movement skills to be practiced, where to go in space, whether to be still or to be on the move, whether to be working on many movements or just one kind of movement, how the body is shaped as the movement is performed, what direction(s) the movement will take in space, how much force needs to be used to perform the movement task, how high or low the body or an object should go in space when it is moved, how many times the movement should done or for how long, etc.

Educational Gymnastic Tasks (4-, 5-, and 6-Year Olds)

The limitation method of teaching can be used extensively with children at this developmental level. For example, if my objective is for the children to work on some aspects of static balance, then my movement task might be presented something like this:

"On the floor or some different pieces of apparatus, find ways to balance yourself using your hands and feet to support your weight." (The limitations placed on the children here are that they must balance, and that hands and feet, not any part of the body, must be used. This

type of task addresses strength development in the upper body, shoulders, arms, and hands. We need to strengthen this proximal area of the body if we are to expect that the distal areas will work well for the child in such hand-function tasks as handwriting or manipulation of objects. These are important activities in the early childhood years.)

"Try different ways to get yourself on and then off the apparatus." (The limitations chosen by the teacher force the children to discover and experiment just with movements which get them on and off the apparatus. In the process the children may also go "along" or "over" or "between," but their attention and learning has the focus of "on" and "off".)

"Travel or move using different parts of your body, or use different kinds of movement. You can do this on the floor or on some piece of apparatus." (The limitations here are that the children must not be still, that they should use a variety of parts of the body as they move, that they should use movements which are different; i.e., jumps, balances, hanging, circling or going-around, inverted or upside-down, swinging, sliding movements etc., and that they have the choice of using just the floor surface or the apparatus or they may choose both.)

"Practice different kinds of jumps. Sometimes make your feet go far apart, perhaps try to make your body into different looking shapes." (The limitations are set on the type of movement to be practiced; i.e., jumping, as well as what the body is doing while it is in the air in terms of its shape. This challenges children's body management skills while the body is in flight or airborne.)

"Make your body roll in different directions or in different shapes. Use long shapes and rounded shapes if you can." (The limitation is again on type of movement to do, but with the child having to give thought to the direction the roll will go and what the shape of the body will be as it rolls.)

Developmental Games Skills Tasks (4-, 5-, and 6-Year Olds)

Young children love to play with balls. Their catching, throwing, bouncing, kicking, and other striking skills vary a great deal, again depending on how many times the child has had a chance to do these skills with balls and other hitting implements. It is very important at this young age to give children lots of opportunities to work by themselves with their own ball or bat. They generally do not possess the skills needed to be able to direct an object, like a ball, accurately to a space or another person. The more "turns" the young mover has the

more skillful he/she will get more quickly, because of the increase in the amount of practice he/she has. We would never think of having one reading book to teach reading to a class of children; nor should we only have one ball for a class/group to help children learn the skills they will need to play a wide range of games both now and later in their lives. Standing in line to wait for a turn is foreign to a young child and should always be avoided. Rather, obtain a ball of any shape, size, or weight for every child, and try some of the following movement tasks;

"Get any kind of ball, and play with it. After you've played with it for a while, if you want to get another ball which is different, then change your ball and see what you can do with the new one."

"Try to have lots of practice catching your ball. You might want to make it go high in the air and then catch it or perhaps send it to the wall and practice catching it. Do it many times and see if you can do it better each time."

"Choose a ball which bounces well. Try different ways to bounce your ball. If you try hands, be sure to use both hands."

"Find something with which you can hit the ball or puck. Choose a sensible space which is not too close to anyone else, and practice hitting."

If young children are to be successful in their games skill practices then teachers must make available appropriate tools for this work. If young children are to build strong, flexible bodies, then appropriate large apparatus must be available for that purpose.

About Appropriate Large Apparatus/ Small Equipment for Educational Gymnastics and Developmental Games Skills

Bats and balls of all kinds must be suitable for the physical size and strength of the children using them. Thus teachers need to select lightweight bats and balls, with handles of varying lengths to accommodate both short and tall children. This is important for safety, confidence building, and ease of manipulation. With young children, *variety* is the key. Many different sizes, shapes, textures, and colors of balls should be available with enough for one ball per child at all times.

Educational gymnastic work is best explored using varied pieces of large apparatus. These include bars of different lengths, diameters,

heights, and combinations; rope equipment (hanging/swinging suspended ropes, rope ladders, horizontal ropes); trestles of different heights, both wood and metal, which can be folded up and stored against a wall or on pegs on the wall; sliding surfaces, to include balance benches or sliding boards with hooks on one end so that they can be inclined to trestles and other bar equipment; balance beams of different heights; ladders with hooks on each end so that they can be used horizontally or in an inclined position; vaulting boxes and stools of different heights; any kind of climbing frame constructed of wood, metal or a combination of both; varied light and easily carried mats. See examples of these items in Figures 13.1-13.4.

If you are looking for a place to start, choose a preposition(s) from Figure 13.5 and some pieces of large or small apparatus which surround the 16 prepositions in Figure 13.5 and construct some movement problems/tasks for your group of children. Some examples might be:

"Find different ways to get ON and OFF...."

"Can you find some interesting ways to move ALONG...?"

"Try going UP, THROUGH and DOWN...."

"How can you get your ball INTO or THROUGH...?"

Our preschools, day care centers and elementary schools need to be better equipped to meet the movement needs and interests of young children. Our young children deserve quality daily movement or physical activity programs.

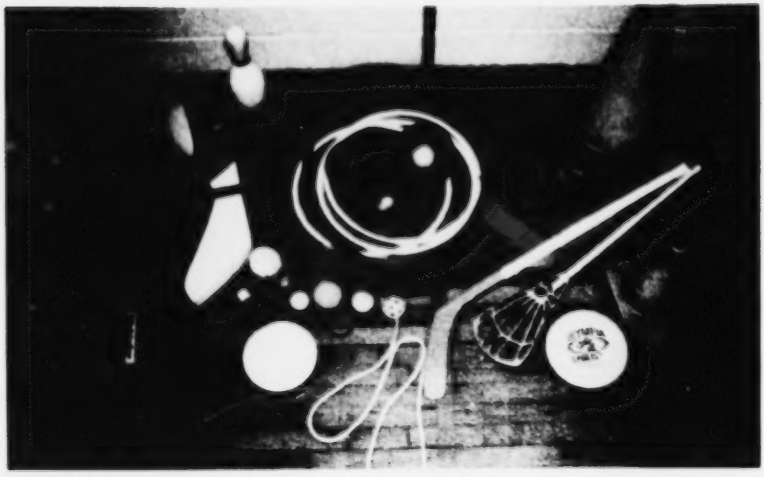


Figure 13.1

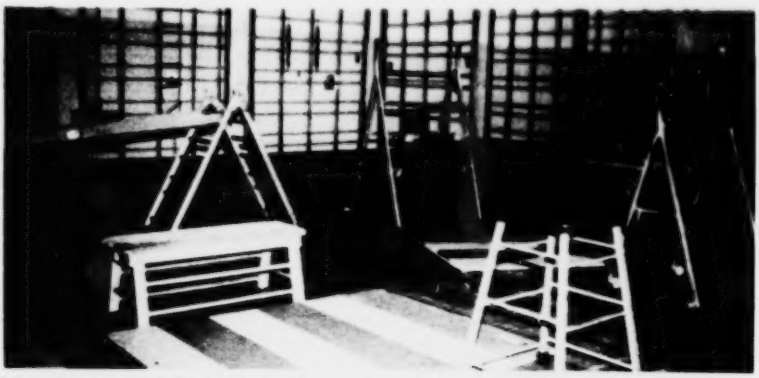


Figure 13.2 Wall climbing frames, vaulting stools, low vaulting box

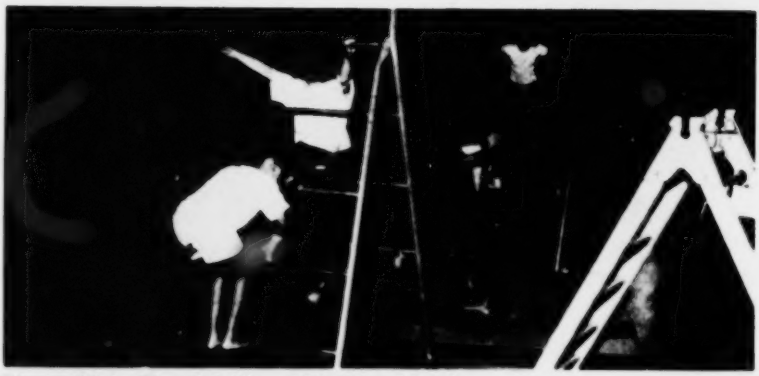


Figure 13.3 Trustles/Bars (Wooden, Metal)

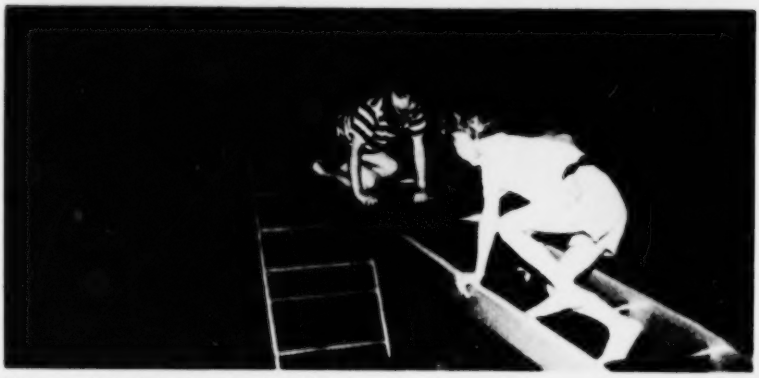


Figure 13.4 Trestles and Ladder

PREPOSITIONS

BALLS (all shapes, sizes, weights)

BATS & other hitting implements

ROPES

HOOPS

BOWLING PINS

NETS (high, low)

TARGETS (all shapes & sizes)

BEAN BAGS

SIMPLE, HOME-MADE EQUIPMENT OF ALL KINDS

CLIMBING APPARATUS OF EVERY VARIETY

ON
OFF
OVER
AROUND
ACROSS
UNDER
UP
DOWN
ALONG
BETWEEN
THROUGH
INTO
OUT OF
INSIDE
BELOW
ABOVE

MATS

BARS (all heights, lengths & combinations)

BOXES

BENCHES

BALANCE BEAMS (different widths)

LADDERS (high, low, sloped)
SLIDING SURFACES

BARRELS

BUILDING BLOCKS

Figure 13.5

Chapter 14

Physical Fitness for Young Children

Lee Allsbrook

Our view of physical fitness for young children is influenced by the way in which we look at children's play and the growth and development of preschool age children. Physical activity and exercise are a part of every child's life. We must keep in mind that as we are constantly changing our outlook as adults on physical fitness, a definition of fitness for children is also difficult and ever-changing.

Two factors help make movement activities meaningful for children: 1) what we know about the growth and characteristics of children; and 2) what knowledge we have for designing physical fitness programs for youngsters. It has been stated that physical fitness is a product and physical exercise is a process. In turn, if children value the process, they have a much better chance of attaining the product of being physically fit. If we are going to identify movement experiences for children, where does physical fitness fit into the curriculum? Is it a curriculum in itself? Or is it contained within a wide realm of areas such as dance, gymnastics, games, etc.? Where do we fit physical fitness in the curriculum? More specifically where do we fit it into a curriculum for preschool age children?

In the first area, infants and toddlers, we must build a curriculum on the stability, locomotor, and manipulative abilities of the child. For example, a child learns to stand (stability), eventually walking and moving (locomotor), and finally handling objects (manipulative). Movement experiences enhance that child's growth and development capabilities, thus, making movement an important part of the learning process. We should value experiences which emphasize these movement skill areas.

The second area is a quality movement skills program for the foundation of a preschool program. A movement approach should be

instituted to provide young children with a variety of experiences in movement. Rudolph Laban's work provides an excellent base for movement experiences in body awareness, space awareness, effort awareness (effort), and relationship awareness to enhance their stability, locomotor, and manipulative abilities. This approach tends to build upon the foundational abilities of children and create greater possibilities for movement and activity for each child.

The third area is the traditional program of physical education, inactivities, such as games, sports, dance, stunts, tumbling, etc. This should be looked upon as an enrichment program for children. These are not the major areas of young children's physical education experiences. Instead, they are enrichment experiences through which we help children to refine their stability, locomotor, and manipulative skills, plus their movement awareness. Teaching a game, a dance, or a stunt, is another way of enriching children's movement and play experiences.

Physical fitness is a focus within each lesson or experience. Are children getting physical activity during the lesson? We are talking about physical activity in terms of a certain amount of intensity, duration, and time during the lesson enhancing the growth and development of each child.

When children are getting quality movement experiences and the activity is vigorous enough to aid their growth and development the result is a program of high quality movement. We must build a curriculum in which physical fitness is a strand running through every lesson. It is not something we do for 6 weeks in a unit. For example, in January, we have a physical fitness center, and then by February or March we feel better but we have not maintained our level of fitness. In other words, the product has been delayed by the process of experiences. What kinds of strategies or teaching styles do we use in preschool curriculum? I do value critical thinking skills of physical education. Explorational experiences, guided discovery, and problem solving are teaching styles appropriate for preschoolers. Building a curriculum includes both identifying the series of activities for children and our teaching approach.

Preschoolers can respond to a series of tasks and respond with quality skills. Preschoolers will generate a lot of fast movement. Therefore, working around a chair, for example, can help control their movements.

> Give the children a chair to work with, in, around, and under. Have them stand up beside their chair and see if they can walk around based upon their locomotive experiences. For some of them that is a good challenge.

Continue building locomotor and stability skills by changing directions around the chair. Hop on one foot; hop on the other foot. Provide jumping, jogging, as well as skipping exploratory experiences for children.

Those children who do not skip will not necessarily succeed or fail for just trying those experiences. Skipping is as advanced as reading a page for a preschooler. We would not ask preschoolers to read a page in a book. It's just as advanced on the basic progression levels of hopping, galloping, and skipping. Do not worry about preschoolers not being able to skip. Some will be able to skip, but most should skip at the end of second grade. Galloping is one progressive developmental skill leading toward the skill of skipping. Do not worry about having a large open space for preschoolers to move. It is appropriate to move right where they are for 2 or 3 minutes around a chair. Beginning by sharing a chair is fine too. Quality movement skills that focus on locomotive experiences in relation to working in a small space are appropriate for preschool children.

Stability abilities probably develop before locomotive abilities. If an infant toddler cannot stand, then even though we call creeping and crawling locomotor experiences, some of those experiences are more of a balancing position than a locomotor experience. A foot game focusing on stability experiences and cooperative play instead of competitive play is cooperative bean bag. Why a bean bag? You can put it anywhere on your body and focus on balance

Put the bean bag on your head and walk around the room. With a bean bag on your head get a partner to go with you. If the bean bag drops, your friend retrieves it and puts it back on the chosen body part. You are showing good balance and good posture. Put it on your elbow, on your back, on your shoulder, anywhere on your body. Often, preschoolers don't know what is on their back. We are helping to create body awareness. Traditionally, if you lost your bean bag you were eliminated from that game. Preschoolers like to help each other. Leave it on 10 seconds. Then let another friend show where he wants to put the bean bag and walk around and balance it.

In this way, we enhance, refine, and enrich the idea of cooperative play rather than competitive activity. That means your friend is a helper and wants you to be successful. At the same time we are working on stability experiences, manipulative experiences, and locomotor experiences. Children are also working on body awareness,

space awareness, effort awareness, and relationship awareness.

Once preschoolers develop stability and locomotor abilities, they begin to want to move in certain directions. A fun activity to reinforce this is, "I see."

> Let's march towards this side of the room. You say, "I see," the children say, in unison, "What do you see?" You respond, "I see boys and girls marching first this direction, and now that direction." They are developing listening skills. "What do you see?" Everybody walking in this direction. "What are you working on?" Walking around the chair, walking in the area around the chair. Be aware that they are all going in the same direction. This is a challenging task for preschool children. Keep changing the directions as they go; children like it when the direction is changed. The children at the back now become new leaders in the experience. That principle focuses on the most skillful child not always being at the front.

So far we have looked at stability experiences and a cooperative activity. Also, We have looked at locomotor experiences and a game called, "I see." Now let us examine an activity to use at the end of the lesson, "sticky popcorn."

> We are going to ask you to start jumping like pogo sticks, moving with partners. Continue jumping as you touch your partner. Two jumping pairs get together, so you are a group of four; continue "sticking" until you have a large group." These jumping experiences are in relationship to the children's awareness. After the vigorous jumping you may say, "slow down, slow down, slow down, and rest." Then, start the melting process. The melting process is when you say, "Ice cream, I want you to melt. I want you to melt. Then sit down on the floor." What you are doing is working on a cool down activity. Jumping will accelerate your preschoolers' heart rate. Gradually reduce the heart rate rather than stopping the activity abruptly.

We have been looking at what activities are appropriate for preschoolers in the area of stability and locomotive activities. The hardest thing for children to do is to stand still. We do know from research that when children are standing still, they are literally working at standing still. Standing still is a skill just as jumping, hopping, or skipping. One reason for that is that preschoolers are still learning to balance and maintain a posture. When you ask them to stand still, it is a part of the lesson. It is true that children focus better on listening while standing still. Be sympathetic to the fact that children are still trying to develop skills and to improve the quality of movement control. When you work with still movement, please

remember it is a quality skill toward developing the ability to stand better.

The curriculum is built not only on stability and locomotor experiences, but also, on manipulative experiences. Manipulative experiences help a child develop better control of their hands and feet while controlling objects. What are manipulative activities? Lets look at catching. It is accomplished mostly by putting the hands out in front of the body. Preschoolers may have a painful experience in learning how to catch. If you want to improve children's skill in catching a ball, remember to throw the ball in an arch. Another manipulative skill is dribbling a ball. Certainly for a child it is a large muscle activity. The first thing you will notice is that the ball for dribbling bounces on its own; this was certainly created by a designer of this product. One way you can help a child be a good dribbler is let the child see that the ball can dribble on its own. Do not worry about whether or not a child can dribble a ball in infant toddler preschool programs. A child in free play or organized play simply drops it, and in effect, it comes back up again. It gives them recall of what they have seen. Basically, they are just trying to catch the ball when it comes back up. For this particular development we are using it as a manipulative skill; we are teaching dribbling as a large muscle activity with vigorousness to it. Children will get some growth and development as well as fitness out of it.

The tests used to measure physical fitness in the last 20 or 30 years have traditionally started testing for fitness at the age of 10. The idea of testing younger children is very unpredictable. Test scores for young children really tell us that the results of the test are a lesson in themselves, rather than a chance for children to show you what effort they can put into demonstrating their skill. First of all, we identified that we needed to change the testing. Secondly, we changed the testing population of 10-year olds all the way down to 6-year olds. Now we have a fitness test based on what we value in physical fitness tests. We said earlier that defining physical fitness meant children playing with more intensity, feeling better all day long throughout their play. We are still looking at health related fitness rather than a measure of children's motor skill development. We will then be able to say that this is what physical fitness is for the population identified. We want to identify with fitness as a physical state of well-being allowing you to 1) perform daily activities with vigor; 2) reduce the risk of health problems related to a lack of exercise; and 3) establish a fitness phase of participation in a variety of physical and motor activities as to the ability to throw, catch, jump, and run. When a person gets older, are they fit enough to do those things? If we persist enough, most of the qualities will come in those programs, but more importantly we have

to establish being at a level of fitness that one can continue. We are defining a quality of exercise that results in physical fitness.

What components of physical fitness do we want children to experience in getting quality related physical fitness? One component is flexibility. For preschoolers, changing the degree of flexibility in lower back muscles is related to the ability to stretch properly. For children, to keep lower back flexibility and hamstring flexibility there are a number of things to do. We want to create an environment to do it gently and stop when it is painful, or when it is uncomfortable. Get results by stretching the muscle to the point that it recognizes as being stretched. The best way of stretching with children is to tell a story. Get on the floor and get the children into a series of posture stretches that will involve flexibility in physical fitness. The end result is that it is playful. How children think about practicing exercises is important to improving fitness.

A second component of fitness is muscular strength — strong abdominal muscles. Having good posture for those of us who are older is an indication of where our fat goes. Strong abdominal muscles get your hips back into place and at the same time make it more efficient to work on a lot of motor skills. Do situps as a game situation for preschool children or as a tumbling activity. You will find that is a part of developing muscle exercises. Another way to practice is to play, "Take it off, Put it on" with a beanbag. Get into the position for situps with your legs bent. Have each child place a bean bag in their hands that they put behind their heads. As they situp they can put the bean bag up on their knees or on a chair in front of their knees. To the preschooler it is a game of put it on, take it off, put it on, take it off, put it on, take it off; meanwhile they are strengthening abdominal muscles. Another area is upper body physical fitness. Strong arms, strong shoulders for the upper body composition gives children better posture. A strong upper body is valuable in that sense alone. What is appropriate for children to do in strengthening their upper bodies? Somebody says pullups. A lot of preschoolers can do a pullup or they can make some effort to do one. About halfway through elementary school children cannot do one or two pullups. There is nothing wrong with trying to do pullups with the idea that it should be easy to test. But I would think anytime children are outside hanging from the climbing bars is a good experience. Encourage them to do it. Have them squeeze the bar and hold their body weight. We do know that if you put a child into the pullup position and put their chin on the bar, and if they come down as slowly as they can, it is another way of strengthening the arms. Working with their arms hanging on the bar, have them do all kinds of things like moving their arms in circles.

Stretching their arms is a valuable experience for muscular strength and endurance for the body. Focusing on the idea of stronger arms and just posture alone is definitely health related. It is now on tests for younger children as early as age 5 and 6. Let them work on the bars. Hanging and changing hand grips develops a lot of muscle strength and endurance for the upper body.

Doctors say you can let a lot of muscles go. You can have weak arm muscles, weak leg muscles, or weak neck muscles. You can have many problems growing up. But the muscle we always say we have to be concerned about is the heart. Cardiovascular fitness for children is really vigorous large muscle activity. Children feel large muscle activity. If it's done rhythmically with duration, children really feel breathless as they continue to play. It's not unusual for children to sit down when they feel large muscle activity after running for a few minutes. They will run so fast and their heart rate will be so high they will sit down just to get control from being out of breath. When they sit down, the heart rate comes back down to more normal levels. Once they get it down, they become more active again. They are not practicing inappropriate ways of exercising to run and sit down, run and sit down, run and sit down. Basically children adjust their heart rates in this way, as adults would do by slowing down. Cardiovascular fitness is valuable. In defining cardiovascular fitness, adults value it in aerobic activities. Now, focusing on young children, my caution is to look at children's play. We build a curriculum based on the nature of growth and development that young preschoolers and elementary children need for this specific component of physical activity.

Finally, body composition is the measure of percentage of body fat. What percentile a child is at the age of 5 and 6 should indicate much more muscle than fat. One idea is to change the diet and nutrition as well as the type of exercise children do. Also, let's take a look at getting more muscle on the child and what's going to happen when you choose the right activity. Let's focus on the activity with the right information. As children are more playful, more activity will create a change in their body composition.

We can summarize the curriculum built in the first part of this paper. One, a series of activities in the major areas of stability, locomotion, and manipulation should be the base of the curriculum. Two, these moving components should be used to enrich the area of organized programs of physical fitness. Three, types of activities that are appropriate for preschoolers make for a more effective program. Finally, our goals of fitness for children should be to make it fun, and to be intensely motivating youngsters toward an active lifestyle for the rest of their lives.

Chapter 15

Children With Special Needs: Mainstreaming and Movement

Eleanore Grater Lewis

The most important concept to embrace in this area, is that of inclusive activity. We must see children first, and handicapping conditions second, starting with vocabulary (children with special needs rather than special needs children). Then we must examine our curriculum to be sure that we are not excluding any child from any activity that we plan. This certainly includes movement; creative movement, dramatics, playground free play, traditional musical games, dancing, and any other motor activities. All must be modified to allow children with physical, mental, and behavioral problems to participate.

I remember a parent of a child with Cerebral Palsy walking into my office announcing, "I see Keri's dancing." "She is?," I answered, knowing that this child could not walk. "Yes," said the mother. "She's using someone else's legs." I went to see and there was Keri laughing delightedly as she whirled round and round in her teacher's arms. She was not excluded.

The children in one preschool class were running all over chasing myriads of bubbles. The gaiety was infectious and everyone was loving the activity. In the center of the room sat Donny in his wheelchair. He was the most important person in the room because he was blowing the bubbles! "Blow here," "No, here." Donny heard and blew here and there, delighting in the resultant chaos.

When creative movement activities are planned, everyone must join even if the participation consists of one teacher pushing a wheelchair through the motions of the activity. If the activity would be a danger, the child must be included in another way—running the tape recorder or record player, timing the activity (egg timers work well), giving out

props, but always spoken to and listened to so that he or she becomes a participant rather than an onlooker.

Playgrounds must be planned with children with special needs in mind. Some paths must be planned that will allow children in wheelchairs to ride and children on crutches or with walkers to move safely near the more active children, to eliminate isolation. In the classrooms, paths between furniture must allow children easy access and if tables are high to accommodate wheelchairs, then some high chairs must be there too, so that children without wheelchairs can join the play.

Barriers can be verbal as well as physical. A child who is mentally retarded may not be able to follow a long complicated story that will be the basis of a creative movement activity. Simple cues may be needed such as, "Jenny, can you move back and forth, back and forth? There! Now you look like a tree in the wind. Back and forth. Back and forth." As the teacher gently holds her hands and they move back and forth together, Jenny feels the motion and can continue.

We make many accommodations in other ways. Children with poor vision or hearing are put in the front of the room so they can see or hear more easily. Children must be brought into movement activities in the same way so that they can move as much as their limitations allow.

Some handicaps create too much movement and children with attention and behavior disorders often have trouble staying still. Here we can structure our schedules so that "waiting time" is at a minimum, and try to arrange for extra adults (either paid or volunteer) in the classroom to help the child focus on what must be done. A free movement activity may be too much for some children, but when there is an adult to move with them to keep focus and attention, the activity can be successful.

All children need to be part of their groups and we can help them by asking not, "Who can take Billy out?," but, "Who can help Billy join in?" Movement is a most vital part of the curriculum needed by all children, and the teacher who creates an inclusive program helps children with special needs develop and grow and build self-concepts of themselves as capable human beings.

Section IV

THE YOUNG CHILD
In the Art of Dance

Chapter 16. Dance and the Developing Child
Susan W. Stinson
University of North Carolina at Greensboro

Chapter 17. Tapping the Internal Rhythm of Young Children
Mark L. Harvey
Metropolitan State College, Colorado

Chapter 18. Linking the Visual Arts with Drama, Movement, and Dance for the Young Child
Bette Fauth, Early Childhood Consultant
California

Chapter 19. Dance as a Multicultural Education for Young Children
Hooshang Bagheri
California State University at Northridge

"Dance and the Developing Child," by Sue Stinson examines the process of creativity in learning and functioning in today's and tomorrow's world. Young children need the educational opportunities in creative movement and dance as a means of facilitating creative thinking and the development of human capacities. Mark Harvey's, "Tapping the Internal Rhythm of Young Children," stresses that all children have the urge for rhythmic expression and can become more competent movers through the encouragement of early childhood teachers and properly guided rhythmical experiences. Bette Fauth's, "Linking The Visual Arts with Drama, Movement, and Dance for the

Young Child," discusses the importance of multisensory experiences in movement and dance toward creating more impressionable learning experiences for young children. Hooshang Bagheri's, "Dance as a Multicultural Education for Young Children," describes the influence of dance upon his early life, and relates how dance can stimulate children to move, think, interact with others, and learn more about various cultures.

Chapter 16

Dance and The Developing Child

Susan W. Stinson

Each of us looks at the world from the unique perspective of who we are. So I think it is important, in sharing a perspective, to share something as well of the lenses one is looking through. I am an educator, specifically a dance educator in higher education, where my work focuses on teacher preparation. I continue to teach children as much as possible, as I have for almost 20 years. I am also a mother of two no-longer-young children, who have contributed as much to my understanding of childhood as has my graduate level education. And I am a global citizen concerned about the fragile world we share. These three lenses, and undoubtedly others, have come together to help me to see the picture I will be presenting in this paper.

A View Of Development

First I would like to look at the implications of the word *development*. In many ways I consider myself a developmentalist. I give lectures to my university students on the stages of human development and their implications for teaching dance. I find the concept of development very useful in guiding many aspects of what and how we teach.

But I find it interesting that we use the same word — development — in speaking of countries and cultures that we do in speaking of children. In the United States, we refer to Third World countries as being underdeveloped — or sometimes even "primitive," and our idea of helping them is to have them turn into developed countries, meaning *like us*. Similarly, our desire to have children develop reflects our desire to have them think, speak, and act the way we do. Individuals who are 40 and act like they are 4 are not highly regarded by most of us.

The point of these rather obvious statements is that there is a value judgment implied when we speak of development. We consider it better to be more developed than less developed; development represents a gain, not a loss. Further, the standard and the judgments are based on the perspective of the judger. People from what we refer to as underdeveloped countries might just as well look at the United States and question whether, for example, it is better to have running water come into one's own house when that means one no longer sees one's neighbors at the well.

I am not going to romanticize being without running water, and suggest that we all go "back to nature" in order to have neighborliness. But unless we know what the usual sacrifices are in the process of development, we are not able to think creatively about how we can avoid a great deal of loss as we pursue the gains that come with development.

We are accustomed to looking at young children, just like the Third World countries, as underdeveloped. I would like to suggest that most young children have certain capacities in greater abundance than most adults, and that there is frequently a great deal of loss in terms of these capacities, that parallels the cognitive, affective, and psychomotor gains that come with development. I hope that by identifying some of these capacities, and their value to us in living full human lives, we may be able to — perhaps not have everything — but at least make wiser choices about curriculum for young children.

The Creative Process

The losses with which I am concerned are ones I might never have recognized had I not chosen to be involved in a creative art form, and come to appreciate that there are different stages involved in the creative process, just as there are different stages in a person's life. Theorists have identified at least four stages in the creative process (see Ghiselin, 1952; Rugg, 1963) but I will be taking a more simplified approach for the purposes of this paper.

Usually when we look at art we see only the final form it takes, whether we are looking at a painting in a museum or dance in a theater. Most of us recognize that considerable skill, and usually years of preparation and study, lie behind the final form. A mature artist needs technical skills, the craft of his or her chosen art form. For some arts, these skills may require many years of dedicated practice. One must also be able to stand away from one's own work and look at it critically — analyzing, clarifying, refining. Artists usually study the

work of other artists, just as scientists study the work of others in their field, as part of developing those skills. The use of the word "work" is appropriate here; developing technical and analytic skills is a laborious process, and employing these skills in making a refined external product feels like work to most artists.

For those who have not experienced this kind of work in art, it might be compared to writing a paper . . . or a keynote address. One spends years developing the skills of writing and critical thinking that are required, not to mention the word processing skills. Getting the right words down, in the right order, to say what we want to say, is clearly not child's play, and involves important skills that students need to learn. The significance of these skills for functioning in today's society has generated pressure on educators to begin them sooner and spend more time working on them.

These parts of the creative process — developing skills and producing a refined product — are essential if our art is to communicate clearly with others; we must be articulate with whatever "language" we choose. However, such work is not the only sort of experience involved in doing art — or any other creative endeavor. We must not only be skillful in communicating; we must have something to communicate.

Ideas and feelings for communicating in art may be initiated by any experience the individual has, implying the need for rich life experiences as part of education. But further, if it is to contribute to the creative process, an experience must become part of the individual in some unique way. It must become *theirs*, internalized as part of the individual's own reality. Most of these internalized ideas and feelings are hidden from conscious awareness. So an important part of the creative process becomes gaining access to the ideas and feelings that are otherwise left locked away. This part of the creative process requires a different state of consciousness than that required for the active work. One must allow it to occur, rather than work at it; in fact, it often feels more like play than work. It is more often messy than orderly. Instead of repetitious practice, one must rely on spontaneity. Because we cannot *make* it happen, there is often a sense of mystery when it does. As the creative form is first emerging, the artist must be immersed in it, rather than standing outside looking critically at it (which happens later). The actor must become the character, knowing him/her from the inside. The dancer must become the dance. This stage involves play, exploration, transformation.

Young children usually excel in play, exploration, and transformation, to a much greater degree than most adults. I first became aware of this as a 12-year-old, when my preschool aged

brother would be sent to brush his teeth. An hour later I would find him playing with little puddles of water on the bathroom counter, oblivious to the passage of time and having forgotten the original task. All preschoolers can find untold treasures in a parking lot on the way to the car, most of which go unnoticed and unappreciated by their parents. Young children can change their own identity instantly, and turn a stick or a cardboard box into any number of creations with which they can play for untold hours. They do not, however, possess high levels of analytical and critical thinking skills or complex motor skills. So it is normal that we think in terms of developing the parts that are missing.

But when I look at most adults, it is easy to recognize that the capacities young children possess in such abundance practically disappear by adulthood. University students with whom I work often despair of ever recovering their own inner child — the part that can unself-consciously play, explore, transform. It is almost as if our inner child gets killed so the adult can be there. However, if the inner child were killed in us all, there would be no art, because there would be no source from which art could grow. There would probably not be any science either, since this is another field that requires creative thinking. The question for us as educators, I think, is how can we allow the child to flourish even while adult skills are being developed?

The Reality Of Young Children

In order to be able to answer that question, it is helpful to think about the reality in which young children live, and the significance of that reality for all of us. One way we can describe such a reality is in terms of its sensory-motor nature. Sensory awareness is an essential aspect of being an artist. For the visual artist, seeing is a critical sense; for the musician, hearing; for the dancer, the kinesthetic sense. The sensory-motor realm is one in which young children live, to a far greater extent than most of us do as adults. Anyone who has tried to get somewhere with a young child knows that they have an uncanny way of noticing things that we as adults often miss — the procession of ants down the sidewalk, the rock that has something shiny in it. And once young children discover something, they are rarely content with just looking at it. A puddle is for jumping over or into. A craggy hill or a weathered fence is not beautiful scenery; it is something to climb.

The sensory powers of young children sometimes leave me amazed. I remember the day my preschool aged son picked up a bag of clean clothes, hand-me-downs that were being passed on by a friend. He

sniffed them and announced, "They're from Matthew. They smell like Matthew's clothes." He was right; they were Matthew's clothes, but I could not smell a thing. I even asked Matthew's mother what kind of detergent she used; it was no different from mine.

On another occasion we were taking a walk outdoors at dusk, playing a "listening game." We took turns stating what we could hear in our neighborhood . . . "I hear crickets." "I hear cars on the highway." Finally Ben said, "I hear flowers growing." I thought to myself, "How imaginative" and decided I would speak of an imaginary sound too, so I said "and I hear the moon starting to shine." Ben promptly replied, "Mommy, the moon doesn't make any sound when it shines." But he knew the sound of flowers growing, and in fact was able to imitate for me the very tiny sound he heard.

Now, the rational part of myself would classify these incidents as evidence of a good imagination. But I often have occasion to wonder whether children may have sensory capacities that we adults have lost, because we have learned what is "real" and what is "imaginary."

Sensation fuels the world of feeling, and young children frequently wear their feelings close to the surface. They throw their arms around us spontaneously when in a loving mood, or hold on to our legs when they are too shy or scared to enter a room full of strangers. I am not suggesting that these behaviors are necessarily ones to be encouraged in all situations. But we do have much that we can learn from children in this regard.

I remember one time leading a preschool dance class on a theme of doing the laundry. Dirty clothes are limp; we can make ourselves limp. Washing machines shake the clothes around and then spin the water out; so we explored these two actions. We talked about two ways to get clothes dry — using dryers and hanging on a clothesline — and we explored suspending ourselves from two points and blowing in the wind. I had next intended to have the children fold themselves up, but one child, who was really transforming, called out, "No, you have to iron us." (This was clearly in pre-perma-press days!) But when I tried to have them stretch themselves to remove any wrinkles, the same child blurted out, "No, iron us by *touching* us!" How many of us can ask so clearly to have our needs met when we need a touch, a hug, some personal acknowledgement?

Sensory awareness is important not only for feeling, but for thinking. Movement and sensory awareness are the primary ways children learn about themselves and their world. Piaget (see Furth, 1970 and Wadsworth, 1971 for an accessible introduction) studied how children form symbols — and therefore language — by internalizing movement. For example, children move up and down before they

know these words. Next, the words become associated with the movement and the accompanying body sensations; young children cannot think or talk about movement without doing it. Gradually the words begin to stand for the movement: the need to do the full movement disappears, and the movement gets smaller and smaller until it is no longer physically demonstrated. It still exists inside, even though it may be reduced to only a slight degree of muscular tension, and although we are not always aware of it, we still use this internalized movement to think conceptually. Even Einstein (North, 1973) noted that he made his discoveries initially through visual and kinesthetic images of movement: he saw or felt an idea first, and the words came later.

In addition to this emphasis on the sensory-motor world, there are other ways we can recognize that young children inhabit a different reality. They see things that we do not, such as when my son told me what he saw at the fireworks: "The sky cracked open and spiders came out!" Their reality is often so strong that when we come upon children deeply involved in "imaginary play," we feel that we should knock to gain permission to enter. Piaget (1929) described this reality as a state of primitive consciousness, in which children perceive inanimate objects as creatures with consciousness, participate in nature, and do not perceive the separations between things. They frequently transform their own identities.... How many times I have entered a preschool class only to have a child say "I'm not Jennie, I'm a cat today. Meow,"...or had a whole class turn into frogs right before my eyes, when I merely asked them if they could jump *like* a frog. A stick can become a horse, and they can become mommies or daddies or whatever they desire. When I took my preschool aged daughter to dance performances, she always picked out one dancer and said "I'm her." Being told "how things really are" is irrelevant, as many memorable moments with young children have convinced me.... I remember the day my young son told me that when he grew up he was going to be a mommy and have a baby grow in his tummy. I told him gently that boys could not have babies grow inside their bodies, but they could become daddies, and daddies got to do great things too — like give baths to babies, and change their diapers, and play with them....Ben chimed in "Yes! And I'll *dance* with my baby." While my dance educator heart was still warming over how successful I had been in teaching him, he continued, "And when I'm finished being a daddy, then I'll be a mommy and have a baby grow inside my body."

Piaget felt that such a primitive consciousness was the result of an inability to understand what really is happening in the world, and he noted that a child's imaginative explanations decrease as the child gets

older, in favor of "representational tools more adapted to the real world". (Piaget, 1929, pp. 130-131) Yet it seems important to point out that, to the artist, the child's conception of the world is not something to be outgrown and discarded, but to be cherished and returned to on deeper levels. Artists often attempt to "tune into" a deep level of connection with nature. While the scientist "knows" that inanimate objects cannot speak, the artist may confront a twisted piece of wood, or a seashell, or a mountain, and open himself or herself to the "language it speaks." The dialogue that results may guide the creative process in the arts. The idea that one might communicate with an inanimate object is not part of the scientist's reality, but may be part of the child's and the artist's reality.

Piaget (1929) further notes that adults may return to more "primitive" states of consciousness in times of stress; the adult who bumps into a table may berate it as though it is a living being who intentionally inflicted pain. The artist may *choose* to return to such a state of consciousness, valuing it as a source of artistic and aesthetic experience.

The work of Hughes Mearns has further contributed to my own thinking about the reality inhabited by young children. His book *Creative Power* (1958) shares stories and thoughts from his work teaching creative writing to students. Mearns is concerned with what he calls the "native language of childhood." He writes,

> Most of the speech of children that we hear is not their ownlanguage but the imitative forms, thought and imagery of their elders. The adults that surround a young child go in eagerly for teaching their own speech; they ignore the native gift or drown it out with doggerel rhymes, set phrases, adult polite idiom, verses and prose made for children by adults. (p. 67)

Mearns notes that adults are standardized persons without the gift of language that marks one's own speech as unique, while children speak naturally in a voice we are accustomed to call poetry. Here is one of many examples from Mearn's book, spoken at bedtime by a young child to her mother, who was wise enough to record it:

> I have a secret from everybody in the world-full-of-people
> But I cannot always remember how it goes;
> It's a song
> For you, Mother,
> With a curl of cloud and a feather of blue
> And a mist
> Blowing along the sky.

If I sing it some day under my voice,
Will it make you happy? (p. 67)

And here is another example, this one a group project coming from a class of 3-5 year olds, following a dance session focusing on images of spring. I arranged the lines, but these were their words, inspired by the movement we had done:

Crack! Crack!
When the clouds get mad they hit together and the rain goes pitter patter
And grass and flowers start popping up
And trees blow in the wind.
The birds come back and they find a place in a perfect pine,
And the baby birds pop out of their eggs
Crack! Crack! Crack!

Mearns speaks of this language as the voice of the inner spirit, and says that "To childhood the life within is one of the sure realities." (p. 65) This inner reality is essential to artists. As Martha Graham, the well-known American choreographer and dancer, has said, "The reality of the dance is its truth to our inner life." (Graham, 1979, p. 52.)

An inner life, an alternate reality — these are different ways of describing something that often dies because we do not give time for it, or because we are told it doesn't exist.

How can we cultivate this other reality with preschool children? How can we let them know we value it, wish it to be part of our own lives — not to the exclusion of other realities, but along with them — so we can choose where we wish to live, so we can travel from inside to outside, from one reality to another? The arts offer one avenue for keeping alive this important part of the self. While there are many reasons I could give to justify dance in the early childhood curriculum, I think this is the most important one.

Dance for Young Children

Next I would like to discuss some ways that dance for young children may be presented so that it helps children gain access to an inner life and alternate realities. In my own teaching, it took me some time to recognize that even if children were enjoying moving and developing movement skills, I was still unsatisfied. I kept asking myself, "What is the difference between *movement* and *dance?*" Preschool children told me that the difference between dance and just moving around is that dance is *magic*. This description has been so

meaningful to young children that I use it often — not in the sense of magic tricks, but as a magical state of being. Our magic comes from a quiet place deep inside us, and each of us possesses it. I sometimes use my geodes to explain this . . . On the outside, they look rather plain and quite similar. Inside each of them is something different and special, and we need it to make our movement turn into *dance.*

Preparing to dance means finding the "magic" inside each of us, often by sitting quietly for a few moments in a relaxed state. As we begin moving, we may explore doing simple movement, such as standing up and sitting down, first in an "everyday" way and then with our inside "magic." As the class continues, the emphasis is on inner sensation and allowing the movement to come from inside ourselves, rather than just imitating what is outside. Devoting their concentration to attending to their interior does indeed transform their movement, and transform themselves from "plain ordinary" children into dancers.

I also ask children to notice moments they experience outside the dance class that make them feel magical, and I encourage them to share these with me and with the other children. They have told me about finding an empty blue shell of a robin's egg lying on the grass, a dew-covered spider web in which there are rainbows, a moment just before falling asleep — feeling "as tired as wet butterfly wings." They have told me about waking up knowing it is your birthday, or waiting for Grandmother to come for a visit, or watching kittens be born. These are indeed magical moments, and it adds to my life as well as theirs to savor and appreciate them.

Once we have "gotten our magic" at the beginning of the class, we are ready to deal with the theme of the day. I try to choose themes that are in some way connected to the child's world, or a world they can enter readily. As an example, I would like to share with you an especially memorable unit I have done with young children on several occasions, that was initiated by my desire to correct the stereotype that most young children — and many adults — hold of Native American dance. I will tell you, like I tell the children, that I am not a Native American and I do not know their real dances, but I know that Native Americans dance about the spirits of things. While we cannot do these special dances, we can make our own dances about the spirits of things.

Prior to this, in earlier sessions, we usually have visited the worlds of other people, with trips to such places as backwards planets, jumping planets, and so forth. We have already discussed how important it is to be respectful of other people when you enter their territory, and what respect means. So we take time as we begin our

class to find our magic and our respect, with a ceremony of the drum. I invite you now to share another reality with me as I tell you this story of time spent with young children....

I tell them that fire was important to people who lived on this land, especially before heaters and stoves were invented. Some of the children have been on camping trips, and have sat around a campfire. As they try to *tell* me about the fire, their bodies come alive, for words are not sufficient.... We are ready to dance.

We explore pointed shapes like flames, changing from one to another. I light some incense so they can watch the smoke drift and curl, and then we explore floating. We put the two parts together in alternation — the pointed shapes and the floating — and create the Dance of the Spirit of the Fire.

We talk of how important the sun is to all of us. We explore rising and sinking, slowly because the sun moves slowly. To make our own Sun Dance, we add a slow turn in between so we can let our own light shine on everything in the room. But young children can only move slowly for so long, so we try doing it fast. Wouldn't it be funny if the sun really went up and down fast? We laugh together as we think about a sun popping up like a jack-in-the-box.

We dance the Spirit of the Small Animals — taking tiny steps and then freezing, looking for danger. In dance terms this becomes a sequence — scurry, freeze, focus. I never ask them to pretend to be squirrels or rabbits. But the children feel their kinship with these creatures, and are transformed. The Dance of the Spirit of the Large Animals is similar, but we use galloping or leaping, feeling our weight as large powerful creatures.

We make other dances, and have other ceremonies over the next several times we spend together. I bring in long strips of white cloth, and we have a banding ceremony as we receive our headbands. The headbands too become transformed — into streamers when we make our dance about the spirit of the wind; into a stream, giving us something to leap over. The headbands also turn into an art project, decorated with each child's own symbols to represent the spirit of the sun, the wind, the fire, the water.

As the unit develops over several days, we finally make a larger dance in several parts — the Dance of the Spirit of the Hunt. It includes stalking — with steps so silent it is as though our feet kiss the earth. Each child chooses whether to dance the Spirit of the Small Animals or the Spirit of the Large Animals. The section on the Spirit of the Bow and Arrow is probably their favorite. I bring in a real bow and arrow to show how a string gets pulled, bending it to get power to shoot the arrow. We bend different parts of ourselves, feeling the

power in our muscles, and then shoot ourselves through space, landing as softly as an arrow.

Another section is a repetition of the dance of the fire; then we conclude with a ceremony of thanks . . .

> I'm thankful for the sky, and all that's in it (the sun, the wind, the clouds, the rain).
> I'm thankful for the earth, and all that grows in it and walks upon it.
> I'm thankful for my friends . . . to dance with.
> I'm thankful for myself.

We never performed these dances on a stage; they have never become polished products to be seen in a theater. Our only costumes have been our headbands, which some chose to wear as belts, when they were not being used as props. The only audience has been the class participants, which have on occasion included various adult groups, from university students to senior adults, dancing with the children; no one has ever been invited just to watch.

As I think back over this and other dancing times I have had with preschoolers, I ask myself what the children learned. This is not a question I have always asked myself, any more than I asked myself what my own children learned from an outing to the zoo or a trip to see grandparents. But questions of accountability have taken on particular significance in today's world, in which there is so much to learn and too little time for learning it.

I certainly can make lists of vocabulary, concepts, and skills that children develop through dance classes; these become part of their total store of knowledge. But learning involves not just adding to a store of knowledge; it also involves discovering what is already there. Young children possess rich inner treasures, including the capacity to enter alternative realities — in which they may hear flowers growing, see spiders coming out of the sky, and become one with a small animal. Yet we all too often teach them that these treasures are mere childish things, to be tolerated and treated as cute, and only in those too young to do the real work that matters in the world. Then by the time children become adults, they no longer have access to their inner treasures, so dismiss them by saying, "I'm just not very creative."

Conclusions

I hope I have made it clear that I think reading and writing, critical thinking and computers, are all important; they were essential to me in

writing this paper. But it is also important to find our own inner resources and dream of possibilities. As educators, we are faced with increasing demands to spend more time helping children develop new skills that they will need in the future. We must recognize, though, that we really do not know what the future holds; much of today's reality was only science fiction 20 years ago. To live in the future, our children will need all of their human capacities — to not only cope with what is, but to imagine what might be.

When I imagine "what might be" in the early childhood curriculum, it includes more time for all the arts, including dance. In my imaginary preschool, children are affirmed not only for what they are learning, but for who they are and what they already know; this is not just to build their self-esteem, but because teachers value children and the child within themselves. Further, teachers find many ways throughout the school day to encourage playing, exploring, and transforming, and to let children see that these activities are important for adults as well as children.

If I really allow my imagination to work, I can envision all levels of education supporting all of the capacities of all students, and acknowledging what young children (and theoretical physicists) know — that there is more than one kind of reality. Maybe if we can recognize that there are multiple realities, we will not have to dismiss or negate others who see the world differently than we do. And perhaps together we can create a reality in which we revere and respect all parts of ourselves and all others with whom we share the earth.

References

Furth, H. G. (1970). *Piaget for teachers.* Englewood Cliffs, N.J.: Prentice-Hall.

Ghiselin, B. (1952). *The creative process.* Berkeley: University of California Press.

Graham, M. (1979). In J. M. Brown (Ed.), *The vision of modern dance* (pp. 50-53).Princeton: Princeton University Press.

Mearns, H. (1958). *Creative Power.* New York: Dover.

North, M. (1973). *Movement education: Child development through motion.* New York: Dutton.

Piaget, J. (1929). *The child's conception of the world.* (J. & A. Tomlinson, Trans.).New York: Harcourt Brace.

Rugg, H. (1963). *Imagination.* New York: Harper and Row.

Chapter 17

Tapping the Internal Rhythm of Young Children

Mark L. Harvey

I am very excited that physical educators and dance educators are being recognized as people who have significant contributions to make toward enhancing the educational processes of early childhood students. This is a noble cause for which all of us can be justly proud to be involved. I do, however, have a real concern that we know very little regarding early childhood development and therefore will have a tendency to "meltdown" or "best fit" materials for use with our new charges. Ten years ago it was rare for first and second graders to receive regularly scheduled physical education in most school districts. Today we are faced with incorporating youngsters as young as 3 years of age in our regular programs. This is a fantastic opportunity but it is also a situation of real concern. How did this realization that early childhood education should be included in the education come about anyway?

Our early childhood programs have resulted from three significant sociological events. In the early 1960s we reacted to the Russians taking the lead in the space race by launching their Sputnik Spaceship. It was decided that American children needed a better education if we were ever going to catch up with the Russians. Our officials determined that we needed to start our children in the educational system at an earlier age in order to provide them with a head start in the educational process. Secondly, the Civil Rights Movement of the 1960s raised the conscience of the nation regarding the lack of success minority students were experiencing in the educational system. Thus, the Headstart program was initiated. However, the Headstart Program was able to meet the need of only one of every five children

qualified to be enrolled in such a program.

The third significant factor affecting early childhood education was the fact that more mothers and primary care givers were leaving the home to seek needed employment. Early childhood programs were recognized as being a viable means of supervising the children of working parents. These combined factors have created a serious demand for more and better day care facilities and providers. With the decline in the number of youngsters attending public elementary schools in urban areas, much of the vacant classroom space which has become available is being identified as suitable for early childhood programs.

What are we in education to do with our new and somewhat befuddling students? Perhaps we could continue to do as we have been doing since the first Headstart programs started in 1965. However, research tells us that we have not always been successful in these efforts. This is evident by the fact the SAT scores, the barometer of our educational success in this country, have declined rather than improved during this period. Rather than continue what we have been doing, I suggest we need additional research to determine what is really needed to aid these early childhood youngsters.

My primary concern in the area of early childhood education is the fact that in conjunction with the decline in academic performance there is also a serious decline in motor and rhythmic skills. Specifically, I refer to those skills related to the performance of a motor pattern involving even or uneven locomotor activities which are performed in time, and under control, with a musical pattern. I have observed that very young children between the ages of 6 months and 3 years of age tend to possess the innate ability to respond to simple cues rhythmically, without difficulty. This is quite aptly demonstrated when we see a baby of 6 months react to her mother's singing voice.

Before day care and preschool education became an acceptable part of societal expectations, one could observe this innate rhythmic pattern continue to develop throughout the elementary years and into the college and adult years. Perhaps this was most evident by the large demand college program planners had from their students for such activities as Saturday Night dances and various school sponsored dance contests. Anyone over the age of 40 can remember the dance craze that swept the high school scene during the 1950s and early 1960s. There were such programs as American Bandstand, Dance Club, and the Top 40 dance bands, not to mention big band dance programs for the "older" folks of that era.

Today one out of every five college students taking a basic rhythms class cannot perform all eight locomotor skills in time with the

appropriate music. Few elementary level children are able to move in time with a musical piece, and many of them will experience great difficulty in remediating their problems.

The Cause of the Problem

There is no clear cut explanation for this decline in rhythmic ability. One would think with the advent and popularity of aerobic dance classes the ability for those participating in such classes to move in time with a beat would improve. However, if one observes the average aerobic dance class one will notice that about 40% of the participants are not performing the exercises in time with the music. Quite often it will also be discovered that the class instructor is included in this group of off beat performers.

Why are so many people in our society having difficulty moving in time with a rhythmic pattern? I would suggest three rather simplistic and somewhat unsupported explanations. However, each of the following suggestions have implications regarding possible means by which we can avoid such problems in the future.

Let us first establish the fact that every person is born with the urge for rhythmic expression. This urge is created and nurtured while the unborn child is still in the mother's womb. The developing fetus experiences and becomes part of the rhythmic patterns of the mother's breathing, heartbeat, and various bodily movements. Once the child is delivered she or he will immediately miss this rhythmic environment and external substitutions must be established. Such a condition is observed when the baby is rhythmically rocked or sung to during a period of restlessness. As the child accepts these new rhythmic connections his or her rhythmic vocabulary expands. The more repetitive the rhythmic pattern to which the child is exposed, the more likely the child is to associate that pattern with a rhythmic vocabulary. The child will later associate body movements with external input, such as moving hips to music or mimicking the dance pattern of an adult observed either at home or through some other source. Eventually the child can move in time with a rhythmic pattern and develops an understanding of the various elements of movement and rhythm.

Where there is a strong rhythmic foundation established which is based upon meaningful experiences, the child will be prepared to solve rhythmic problems successfully. If one step in this process is delayed or excluded, a developmental gap occurs. This gap will affect the child's ability to perform various rhythmic activities correctly.

Some individuals may be experiencing this developmental lag.

The second reason some children are experiencing difficulty in performing rhythmic activities is directly associated with their early involvement in a highly structured day care system. Such involvement removes the child from their older siblings and peer group members who have traditionally held the important role of passing down various singing games and activities. Such activities are traditionally associated with helping children develop meaningful rhythmic vocabularies. With the amount of time available for cross-age play activities in a day care environment, such activities are highly structured and taught for educational benefits rather than simply for entertainment value.

The third reason I feel children lack a well developed rhythmic vocabulary is due to auditory deprivation of selected input. There are two components associated with this explanation.

1. Before mothers were forced into the work force either because of need or necessity, they were able to keep their children at home with them during the day. During this period the mothers generally entertained themselves by listening to various radio programs. Most of these programs consisted of the contemporary music of the period. This was one way of relieving the tediousness associated with some aspects of daily house work. It is a well known fact that most contemporary radio stations will only play forty different recordings each day. This process allows the listeners the opportunity to internalize the music being played and become familiar with its elements. While mom was internalizing this music, so were the children. When the opportunity to listen to music at home was no longer available, the children were left without acceptable role models of acceptable auditory input.

2. As television sets became more affordable through advancing technology, they began to replace the radio as the primary source of entertainment in the home. This change affected the type of rhythm to which children were exposed. Television music was developed to highlight a video image rather than provide auditory entertainment. Repetition and internal auditory aesthetics are not a central part of this medium. There is one notable exception — television commercials. Even commercials are difficult to respond to because they move so quickly and, at best, will only last for about 30 seconds at a time. Yet television commercials manage to capture the child's attention nevertheless. The radio programs provided a repetitive series of sound patterns that lasted long enough for one to really identify. This was a very effective manner for providing meaningful input toward developing a child's rhythmic vocabulary.

Teachers in child care centers and school systems tend to add to the problem by exposing children to unfamiliar musical patterns and requesting them to perform abstract movement to them. Most children do not have the movement and rhythmic vocabularies necessary to experience success in such activities.

What Must We Do To Change The Situation?

If we truly want to develop competent movers and youngsters who can appreciate dance and rhythm as art forms, we must tap their internal rhythms. This can be done through providing our students with a sound, well thought out movement and rhythmic program that follows a format which is compatible with the students' normal growth and development patterns. Such a program must include the following steps.:

- Allow the children to create their own sounds to move with rather than music we have selected;
- Provide each child with the opportunity to understand the relationship between rhythm and movement;
- Provide each child the opportunity to understand and perform in a competent manner, all of the basic locomotor, nonlocomotor, and manipulative skills within that child's specific level;
- Once the children understand basic fundamental skills, provide them with the opportunity to perform creative activities using such skills;
- Make every teaching experience an opportunity for growth for both the students and the teacher.

The following activities are very useful in tapping the internal rhythm of youngsters in early childhood programs. Due to the limited space available I will only list the various activities. Each of these activities may be found in one of the currently available physical education textbooks.

When teaching singing games to children in the early childhood program one should have a very rewarding experience. Children of this level are very open and free. They really seem to let themselves go and enjoy the experience.

Keep in mind, however, that early childhood level students vary a great deal in physical ability, maturity, and interest so one will have to use a variety of methods to keep the level of interest high.

Singing Games for Early Childhood Students

Name of the Activity	Skills Required	Formation
1. Little Sally Walker	walking	circle
2. Ring Around the Rosy	walk, skip	circle
3. Loobie Loowalk	skip, slide	circle
4. Farmer in the Dell	walk, clap	circle
5. Let Your Feet Go Tap, Tap, Tap	clap, skip	circle
6. Hokey Pokey	turn, shake	circle
7. Sally Go Round the Moon	walk, run, skip, slide	circle
8. The Muffin Man	walk, clap	circle
9. Did you Ever See a Lassie	walk, mimic	circle
10. Peas, Porridge Hot	turn, run	circle

All children are born with the urge for rhythmic expression. It is our duty to tap that internal rhythm.

WE HAVE RESPONSIBILITY

We have responsibility for children who put chocolate fingers everywhere,
who like to be tickled,
who stomp in puddles and ruin their new pants,
who sneak popsicles before supper,
who erase holes in math workbooks,
who can never find their shoes.

And we have responsibility for those children
who stare at photographers from behind hungry eyes
who can't bound down the street in a new pair of sneakers,
who never "counted potatoes,"
who are born in places we wouldn't be caught dead,
who never go to the circus,
who live in an X-rated world.

Who have responsibility for children
who bring us sticky kisses and fistfuls of dandelions,
who sleep with the dog and bury the goldfish,
who hug in a hurry and forget their lunch money,

who cover themselves with Band-aids and sing off-key,
who squeeze toothpaste all over the sink,
who slurp their soup.

And we have responsibility for children
who never get dessert,
who have no safe blanket to drag behind them,
who watch their parents watch them die,
who can't find any bread to steal,
who don't have any rooms to clean up,
whose pictures aren't on anybody's dresser,
whose monsters are real.

We have responsibility for children
who spend all their allowance before Tuesday,
who throw tantrums in the grocery store and pick at their food,
who like ghost stories,
who shove dirty clothes under their bed, and never rinse
out the tub,

who get visits from the tooth fairy,
who don't like to be kissed in front of the carpools,
who squirm in church and scream on the phone,
whose tears we sometimes laugh at and whose smiles can
make us cry.

And we have responsibility for children
whose nightmares come in the daytime,
who will eat anything,
who have never seen a dentist,
who aren't spoiled by anybody,
who go to bed hungry and cry themselves to sleep,
who live and move, but have no being.

We have responsibility for children
who *want* to be carried and for those who must,
for those we never give up on and
for those who don't get a second chance,
for those we smother, and
for those who will grab the hand of anybody kind enough to offer it.

by Ina Hughs

References

Dauer, V. P., Pangrazi, R. P. (1989). *Dynamic physical education for elementary school children*. 9th Ed. New York: MacMillan Publishing Company.

Gallahue, D. L. (1987). *Developmental physical education for today's elementary school children*. New York: MacMillan Publishing Co.

Graham, G., Holt/Hale, S. and Parker, M. (1987). *Children moving*. Mountain View, California: Mayfield Publishing Company.

Kirchner, G. (1989) *Physical education for elementary school children*. 7th Ed. Dubuque, Iowa: Wm. C. Brown Publishers.

Nichols, B. (1986). *Moving and learning: The elementary school physical education experience*. St. Louis, Missouri: Times Mirror/Mosby Publishing Company.

Chapter 18

Linking the Visual Arts with Drama, Movement, and Dance for the Young Child

Bette Fauth

In the Soviet Union, Leningrad, Moscow, Yerevan, children go to Children's Palaces after school, 4 days a week for 2 hours to study music, dancing, painting, sculpture, and other visual arts.

In China, the arts were nearly obliterated during the Cultural Revolution, 1966-1976. Now a great effort is being made to restore them. They are being integrated into the elementary school's daily curriculum.

In Japan, school children are getting 3 hours of art instruction a week, in addition to music and other Japanese arts.

In the United States, children average 25 minutes a *week* (not even one-sixth as much time as the Japanese children).

Should *our* children be short-changed while the Russians, Chinese, and Japanese provide a rich aesthetic culture for their future citizens?

The time and place to take a proactive approach to educational success is now in early childhood. Early childhood is the time to develop as many facets of the brain as we can — the right side, the left side, every area possible, in order to insure success in reading, language, critical thinking, and the flow of creative ideas a few years down the road.

If you want to reach 6 or 7 year-olds in reading, you begin now. At the age of 3 and 4 years, provide them with myriads of multisensory experiences. You give them a multitude of opportunities to make choices, to sort, match, draw, paint, cut, glue, staple, starch, assemble,

construct, move, to explore body movements and rhythm, dance, dramatize, experience music.

Let's look for a moment at *how* we learn and *how* we *retain* what we learn.

We acquire:

- 1% of our body of knowledge through taste alone;
- 1 1/2% of our body of knowledge through touch alone;
- 3 1/2% of our body of knowledge through smell alone;
- 11% of our body of knowledge through hearing alone.

This is why so much talking *at* children goes by the wayside. It's only by combining another sense with it that raises the percentage. Eighty-three percent of our body of knowledge is gained through sight alone. This is why linking the visual arts with *any* activity enhances learning.

How do we retain what we learn?

We retain:

- 10% of what we read;
- 20% of what we hear;
- 30% of what we see;
- 50% of what we hear and say at the same time.

See how the percentages jump when two senses are combined:

- 70% of what we hear, see, and say;
- 90% of what we hear, see, say, and *do* (acting out, dramatizing, dancing, painting, drawing, constructing).

The more senses we bring to an experience, the deeper the impression it makes and the longer it will be remembered.

Input is the single most important factor in getting high quality art work from children, in getting creative inspirational movement in dance, and high performance in academics later on. Input means pouring in endless varieties of stimulating experiences and information — talking to children the right way, asking the right questions, listening, and responding.

Without the pouring in now, at this early age, you will get nothing but mediocrity — redundant, repetitious meagre results now and especially in the future.

Creativity is not something that you or a child pulls out of the blue — from nowhere, something only the "talented" do. Often we have heard someone say to another who has accomplished a task successfully, "Oh, but you're so creative!," thus implying that no effort then had to be made on his or her part. Nonsense!

Do you know what creativity is? It is rearranging *known* pieces into new *forms*. It happens when senses are sharpened so that, with much input and many chances to explore and discover, new ways of doing,

making, and moving will occur.

If you *are* "creative" it's because you were fortunate enough to be provided with lots of input by a teacher or teachers somewhere early on, a parent, grandparent — someone.

Let me remind you of a very important point. The ages between 3 and 5 are the most vital and fruitful in the development of creativity in an individual. Now see how heavy is your responsibility. Whether you know it or not, you will foster creativity, or you will hinder it, or you can annihilate it. But *you* who are here won't. You come to national conferences on aesthetics and you care deeply about fostering creativity.

Children are very visually oriented. I used an abundance of visuals of every kind when I taught deaf children and Head Start children: prints of famous paintings, picture books, magazines, film strips, films, posters, and my own drawings.

"But *I* can't draw," you say. Well, it's easy with modern technology all around us to copy animals or any subject from a picture. Copy with a copy machine into a transparency and use an overhead to project it to trace it any size you need.

There are many ways to link visual arts with movement.

Moving With A Poem-chant

Let's take the poem-chant, "A Skeleton Jiggles His Bones." I am using this poem-chant only as a guide — an illustration to show how you can use many chants, poems, and songs in the same way. If the trend in your area is away from holiday themes, change it to a nature idea — one for fall — scarecrows or cornshocks coming to life, leaves swirling, pumpkins rolling, crows flying.

Visuals come first. In presenting this, you might ask the children (show a skeleton picture):

What is this?
Have you seen one before? Where? When?
What is the skeleton doing? Can you do this?
Johnny, you show us. (He volunteered.) "He is jiggling his bones!""Denise, how do *you* think a skeleton jiggles his bone?", etc.

The chant goes like this: (Chant as Denise and others jiggle.)

A skeleton jiggles his bones, his bones,
Jiggles his bones, Jiggles his bones;

An arm goes up — a leg goes down,
A skeleton jiggles his bones.

Let's clap it together — chanting. You can tap it with sticks — with drumbeat or shakers — or tambourine — that's especially good for jiggling. Let volunteer children act out while the "orchestra" claps, taps, etc. Let the movements come from the children. It is not meant to be a teacher-oriented activity. Call attention to the many different ways children are jiggling.

Proceed with the next verses always asking the children: "Have you ever seen this before? What are they doing?", etc. The witches swoop and dip. "How would we *do* this?" Jack-o-lanterns roll, tumble, and bumble. Goblins skip, prance, and hop. Children knock and thump and cry, "BOO!" Encourage the use of large body movements, and sometimes tiny little ones, when appropriate.

Two witches on switches ride over the moon,
Ride over the moon, ride over the moon;
Swooping and dipping, ride over the moon,
Two witches ride over the moon.

Three jolly pumpkins go rolling along,
Rolling along, rolling along;
Tumbling and bumbling and rolling along,
Three pumpkins go rolling along.

Four goblins go skipping and prancing about,
Prancing about, prancing about;
Hippity-hoppity, prancing about,
Four goblins go prancing about.

Five little people knock at the door,
Knock at the door, knock at the door;
Knockity, thumpity, knock at the door,
Five little people cry, "BOO!"

Bette Fauth

Encourage the children to chant along. This is choral speaking. They can chime in on the repeated lines. Then finally they'll say all of it.

This chant works with the tune, "Here We Go Round the Mulberry Bush."

The visuals in Figure 18.1 may be blown up on an overhead projector or on a copy machine. You can do them in paint, cut paper — add glitter — bright colors to use as visual aids. These are for *teacher use only* — *not* to be made into ditto sheets for children to color.

Figure 18.1

The children can paint their *own* goblins, pumpkins, scarecrows, cornshocks, and crows after they have done the motions of all of these. Use tempera paint on colored construction paper — or newsprint. They may be cut out and pasted to colored backgrounds.

The system of presenting visuals, inducing lots of talk, adding chants, choral speaking, sharing movement, is a way to introduce a multitude of activities...in movement, dance, art, language, rhythm, and reading.

Visuals don't *have* to come first. Sometimes the art activity comes first.

The art activity came first with the turkeys. The children painted turkeys after we visited a turkey farm. Each child was impressed by a different aspect of the turkey. One looked forlorn; one, apprehensive (looking behind him); one had *huge* feet — some children feel threatened by turkeys running toward them. One had an enormously long neck that curved and stretched out to peck! And was done by a new child who had come from a program with meagre art experiences and a lot of meticulous coloring within lines, a program in which neatness was over emphasized. Her turkey very small in the center of a large paper. She had by far the highest I.Q., but her paintings lacked spontaneity.

What an inspiration these paintings were for "being the turkey" *you* painted. And then being everyone else's turkey — moving on big cloddy feet, stretching long necks, flapping wings, and so on.

The Parent Letter

Keeping parents informed of experiences in your center reinforces what you are doing and encourages talk about it at home. I tried to dash off a note every day, but even once or twice a week would be very rewarding. Use colored paper if possible and always some kind of drawing — stick figures — anything to distinguish it from "junk mail." Attach the chant in this case — or the poem, song, rules for a game, etc. (Figure 18.2)

"The Wacky Walks"

Children love weird and unusual ways of walking and they chant spontaneously. They quickly pick up on the chants of other children. Try this one, "The Wacky Walks," to the rhythm *or* the melody of "Do You Know the Muffin Man?" (Figure 18.3)

To Parents: October 20, 1988

From: _____
Teacher's/aide's name

Dear Parents:

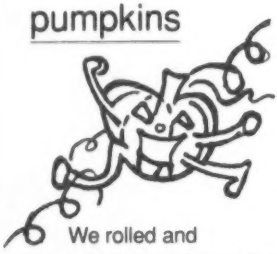
Today we were skeletons

we jiggled and jiggled.

witches

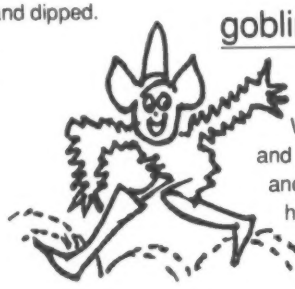
We swooped and dipped.

pumpkins



We rolled and tumbled and bumbled.

goblins



We skipped and pranced and hippity-hopped.

and children dressed up for Halloween!

We knocked at doors.
We thumped at doors.
We yelled "BOO!"

_____
Name

took pictures.

_____
Teacher's/aide's name

Figure 18.2

Figure 18.3

The "Wacky Walks"
(to the tune of "Do You Know the Muffin Man?")
I can walk the *stiff-leg* walk,
The *stiff-leg* walk, the *stiff-leg* walk.
I can walk the *stiff-leg* walk,
All a-round the town.

stiff-leg:

heel-step	toes-in walk	swaying
side-ways	toes-out	prancing
backward	tip-toe	bent-over
left-foot	wobbly	peg-leg
right-foot	jerky	hoppy
stamping	gliding	twisty
jumpy		

The Scarf Dance

To begin the "Scarf Dance" I hold the scarf by one corner moving it gently back and forth. "Do you think you could hold the scarf and move it like this?" Children take turns. Hold it by two corners. "How can we move it, holding it like this?" Let it float. Walk with it, etc. Encourage ways of moving. Go slowly.

Let the children experiment with the scarf at first. Have them run on tip-toe with scarfs floating at their sides or floating behind them as they hold them as high over their heads as they can. The teacher may at some point clap a rhythm for a run or walk, or use a drum, tambourine, or tinkling finger cymbals. Vary tempo, faster, slower; vary volume, softer, louder.

Beware of the temptation to say, "Let's all watch Joey, because he's doing it so nicely." Nothing stifles creativity more quickly and effectively than such a remark. The approach of recognizing all of the children all of the time should be the prevailing climate in order to promote a feeling of well-being in even the shyest child. This fosters creativity.

Rather than calling attention to *one* child who is doing an activity "so nicely" — say: "Jocelyn elephant is swinging mightily and joyfully while Kirstyn elephant's trunk moves gracefully and lightly, way up high, swaying as she moves. Jarrett happily hippity-hops merrily along. Rachel is spinning like a top. Setsuko moves her scarf like a fan."

After a time, pictures of natural elements may be used to further inspire children. The combination of visuals *and* words more than doubles information retained, we remember 50% more if we *see* and *hear* at the same time — 90% if we add *doing*.

Use pictures from magazines, calendars, and children's books. Xerox and paint them — or color them with oil pastels. There is a set of visuals that I made to go with the Scarf Dance (12 x 18 B/W) to inspire movements of clouds, ocean waves, flowers sprouting, birds, butterflies, cowboys, Superman-woman, etc.

The scarf is versatile, and its graceful motion enhances the movement of the child. It inspires the children to move from clouds and ocean waves — little ones to ponderous ones that "cover over" me!

"I am a seed sprouting and growing into a flower, swaying in the morning air. I am a bird—my scarf is its wings. I swoop and dip. My scarf is a bandanna. I am a cowboy, galloping, I am a prince — a princess — my scarf is a long cape. I have a heavy golden crown on my head, and I will walk like a king — a queen. I carry a flag in a parade. I am a tiny fairy — an elf. I flit from flower to flower. Their fragrance is so sweet. I think I'll stay here for a while."

Their whole bodies and spirits *move* from one moment being stars in the ice show to the tenderness of lovingly holding their scarfs as a precious thing. The mood is constantly changing — lively, strong, happy, light, pensive, soft.

Let children know that dancing with scarfs is a valued art form. Charles Moore, a famous black dancer, used scarf dancing in the tradition of his culture. Post such a picture where it can become a part of a child's experience. Let the child begin early to develop an appreciation that our culture is influenced by the artistic contributions of various ethnic groups.

Crepe paper and cloth streamers are fun to use as a change from scarfs. These can be handled even by 2 year olds provided the streamers are short enough.

Emotions

Emoti[illegible] sp[illegible]ingboard into action! *Move with feelings!* D[illegible] s expressing emotions have been helpful to me. They c[illegible] any size and attached to pipe step cleaners. (Figure 18.4 a[illegible] 18.5) There's a little song I use with these that children love. "When I am angry, I do this!" (Figure 18.6)

MOVE WITH FEELINGS!

Make them large or small.

Hang them!
Fasten on paper sticks or pipe stem cleaners or straws.

Have children imitate.

HAPPY

"When you are surprised, how do you look?"

"How do you feel when you look like this?"

"How do you move?"

"How do you dance?"

Figure 18.4

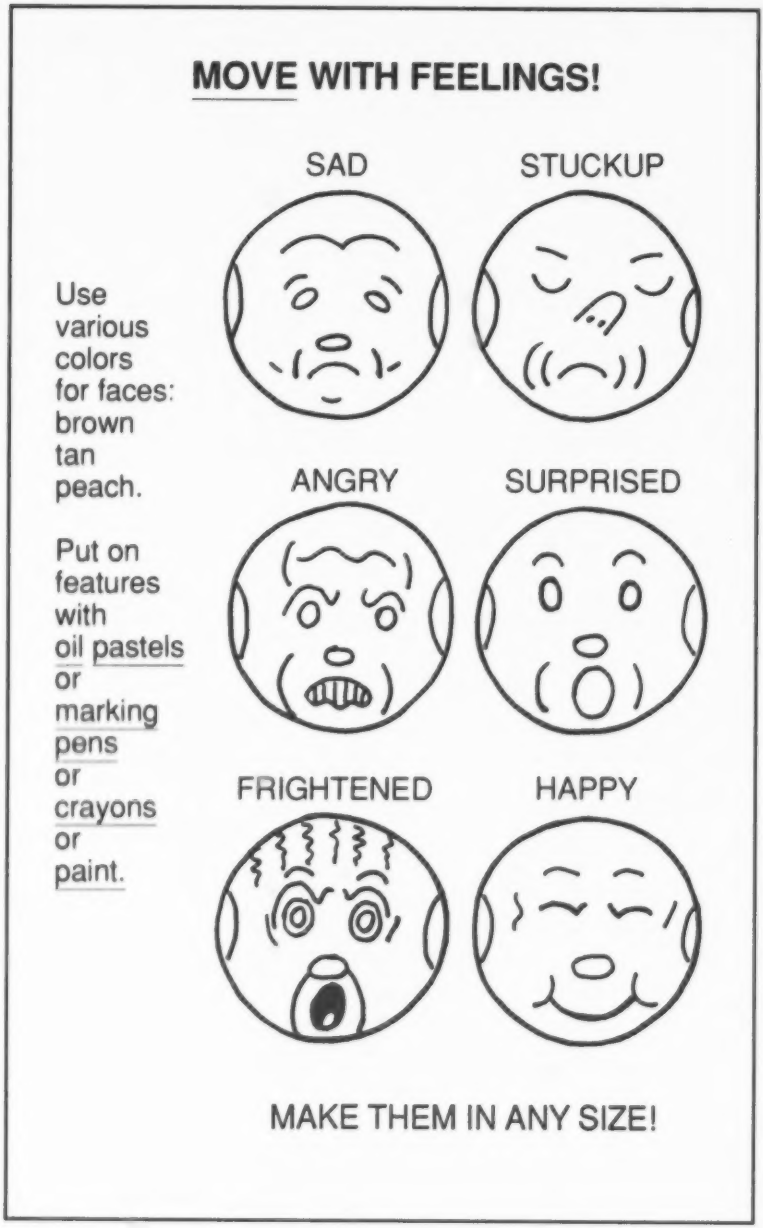
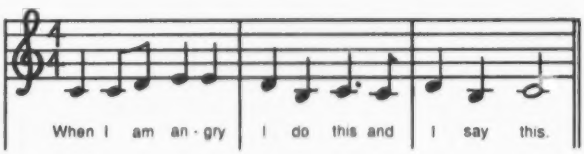

MOVE WITH FEELINGS!
SAD
STUCKUP
Use various colors for faces: brown tan peach.
ANGRY
SURPRISED
Put on features with oil pastels or marking pens or crayons or paint.
FRIGHTENED
HAPPY
MAKE THEM IN ANY SIZE!

Figure 18.5

ANGRY SONG

Act out the "Angry Song." Express feelings through:

- facial expression
- large body movements
- sounds of movements and voice
- use appropriate rhythm instruments

ANGRY GRIMACE

"I'm angry at you!"

Pointing and frowning.

When I am hap-py I do this and I say this.

sad

mer-ry

lov-ing

Figure 18.6

Sculpture in Motion

Bring 3-dimensional art into the learning center. Invite a sculptor in your area to lend you a piece of sculpture. It's hard to get the idea of sculpture from a 2-dimensional picture. Then let children be a sculpture! Bring a large piece of cloth tubing. Children may crawl inside the tubing, then begin to move slowly — to create sculpture in motion. They may freeze from time to time — then take another position. Small groups of children may watch two or three perform together. It makes a good "show."

Creative Movement May Develop into "A Dance Story"

When I was teaching rhythm to young deaf children, visuals of seasonal themes inspired movement: Irish dancers on the green, lively frogs and bunnies in a springtime setting, flower seeds growing, prancing reindeer, snow falling. Children acted out, imitated the actions — using skipping, hopping movements, swaying, prancing — each moving in his or her own way. One would start and the others join in. I encouraged this and would pick up the autoharp and play to fit their mood.

Together we made up a little girl skipping through the woods, gathering flowers in her basket, meeting a frog, and joining him in a dance, getting tired, falling asleep, being discovered by tiny flitting fairies, who bring their fairy queen and her court to crown the little girl Queen of May. The Fairy Queen then commands all the months to perform in her honor.

There were snowmen dancing in January, an improvised minuet for February, and in succession Irish dancers, bunny antics, flowers growing from seed, water ballet, Indian dancing (developed from steps taught us by Indian children), scarecrow dances, and reindeer improvisations.

A set of visuals for this "May Fete in Fairyland" was developed so that we could use it for story-telling and language development as well as dance and movement.

This was not a teacher-oriented venture. The children improvised and developed all of the movements. Whatever they did, in whatever way they freely interpreted the movements of the characters, these became the dance. It was never the same twice.

As the visuals were presented, I asked, "Who is this? What is happening? How would he dance? How would he move?" "Jack is moving very slowly. Let's all try Jack's movement. Kirstyn is going quickly — I think she has a wand in her hand — let's all try that. Jocelyn swoops down. Let us try each one's movement. Now Jack's, now Jocelyn's" — and so on — until everyone is doing his very own motion and trying everyone else's.

Movement from Stories

Three Little Pigs

To begin, use a good picture book of "The Three Little Pigs" to learn the story. The pig houses are made of refrigerator cartons. The top flaps are taped up to a peak and become a roof. The children painted the houses solid colors. They glued straw to one; they gathered sticks and twigs to glue here and there to another. A door was cut into the back for easy entry. They added trimmings.

Figure 18.7 is a basic mask pattern that works for almost *any* animal. Children who do not like small eye holes can have this much bigger one! Once you have this basic shape, the children can add noses, ears, paint, of yarn as they like.

Golden Egg Book

Again, we started with visuals and story — "The Golden Egg Book" — a big picture book.

The bunny hears something in the egg. Pick-pick-pick.
He tries to waken whatever's inside.
He kicks it.
He throws acorns at it.
He rolls it.
Finally, he falls asleep, exhausted.
A duck comes out of the egg.

(We reinforce the concept of awake-asleep with a picture.)

A duck comes out of the egg.
The duck sees the bunny — now asleep.
The duck nudges the bunny, kicks him,
rolls him, throws acorns at him.

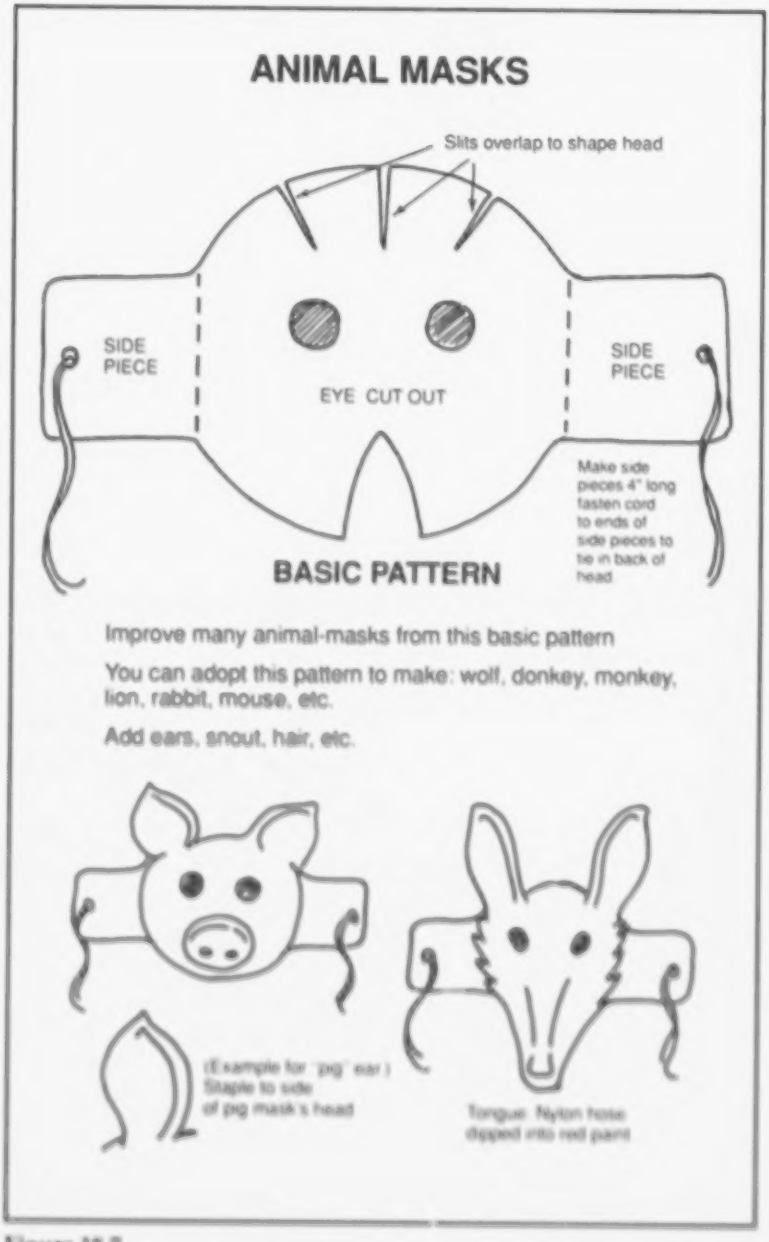

ANIMAL MASKS
Slits overlap to shape head
SIDE PIECE
EYE CUT OUT
SIDE PIECE
Make side pieces 4" long fasten cord to ends of side pieces to tie in back of head
BASIC PATTERN
Improve many animal-masks from this basic pattern
You can adopt this pattern to make: wolf, donkey, monkey, lion, rabbit, mouse, etc.
Add ears, snout, hair, etc.
(Example for "pig" ear)
Staple to side of pig mask's head
Tongue: Nylon hose dipped into red paint

Figure 18.7

The bunny finally awakens.
Where did *you* come from?
And no one was ever lonely again.

Figure 18.8 is a good bunny hat. You can make brown ones, black ones, white, or spotted ones.

Reindeer Dance-Story

Melvin lay on the floor because he's the biggest, on brown paper. The children traced him with white chalk and took turns painting him into Santa. They painted a barn's row of stalls and made reindeer heads peering over the stalls. Our reindeer come right out of the barn to do the "Rudolph Dance." (See Figure 18.9 — Rudolph — for the procedure we use to develop the movements.) We wear bells on a red string around our necks, put on our antler head bands, put old "Knee-highs" on our hands, and sometimes pin a tail behind! We can sing a reindeer song, "Rudolph" is a good one, or play one on a record or tape. We add bells, tambourines, and coconut shells for hoof sounds.

Nursery Rhymes

Leave props and pictures of stories and nursery rhymes out where they can be seen out for instant drama! They spark ideas. Little Miss Muffet, Jack and Jill, Train Engineer. Frosty works well on the bulletin board through the snow season with his top hat, broom, scarf, mittens, and boots ready for dress up and dance.

Puppets

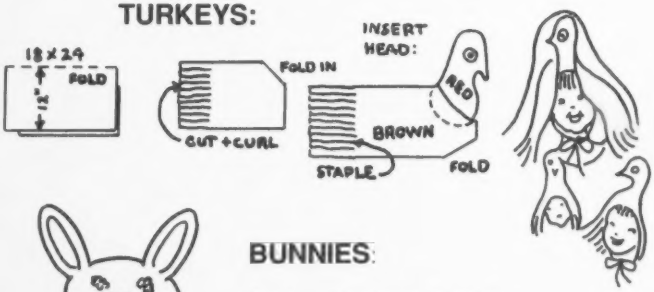
Puppets are effective for getting children to move and talk imaginatively.

The Three Little Kittens - After several readings of this story, the children will help to chant the lines, "Mee-ow-mee-ow-mee-ow", and many of the mothers' lines as well as the kittens' lines. The kittens hang mittens around their necks.

The puppet designs in Figure 18.9 because they are my own and not available elsewhere. The children can act out the parts using the puppets. Later they can act out more freely without them. We like the #1 or #2 bags for tiny hands!

DRAMATIC HATS

TURKEYS:



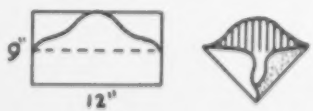
BUNNIES:

For dramatic play, movement, spring time, dramatization of stories
Make them brown, white, black, or mixtures

Fold top down, bottom ends in to overlap with top.
Staple together to fit head.
Attach yarn to tie securely.

TRI-CORN HAT:

9" x 12" construction paper—1 red, 1 white, 1 blue (all 3 of these for each hat)
Fold in half lengthwise



Cut out; fold in half.
Staple together at ends to fit head.
Staple so corners are points.

NEWSPAPER HAT:

Make of printed newspaper.

Paint freely in red, white, and blue poster paint.
Staple on yarn ties.

Sing! March! Drum! Have A Band!

Figure 18.8

EXAMPLES OF PUPPETS ON DISPLAY

CHILDREN

BASIC HEADS:
brown
tan, ochre
flesh tone

HAIR:
brown
yellow
ochre
orange

Use #1 or #2 bags for Tiny hands; lunch bags for larger puppets.

GENERAL DIRECTIONS FOR ALL PUPPETS:
Let children draw their own.

Glue head on rectangle of bottom of bag.

Always glue mouth inside.

THREE BEARS

Daddy Bear may have a bow tie,
Mama, an apron, beads, etc.,
Baby, a bow, buttons.

THREE LITTLE KITTENS

Tissue hat
KITTENS:
black
gray
orange

They may have mittens (on a string of yarn!) and a pie for mama cat!

RUDOLPH
blue eyes
sequin or glitter
on red circle

inside of mouth

Figure 18.9

The Three Bears are wonderful for helping with big motions, ponderous Daddy Bear, the children's ideas of Mother Bear motions, and Baby Bear motions. They are perfect to use for making children aware of voices — low, medium, and high. Through them children experiment with pitch, volume, and voice quality.

Rudolph the Red-Nosed Reindeer is also a big hit. Sing the song. Act it out. Ask: What does a reindeer do with his feet? What else can he do? (Paw the ground, and stamp.) What is on his head? Show me how you think he might move his head (fast, slowly, twisting, turning.) When reindeer meet, how might they say "hello"? (Bumping antlers, rearing, etc.)

When there is enough input — often enough — on a daily basis the ideas come pouring out.

"Children" puppets can be used any way you wish — for language enrichment, dramatization, songs, stories, choral speaking, poetry, and movement. I developed mine because I needed puppets of children with different colors of skin and hair textures, children from various cultures, and small enough for tiny hands. They are one more springboard into ethnic folk songs and dances and for telling each other some very deep thoughts.

Body Masks

Visual arts are a way into movement, drama, and dance. Child size body masks are fun — just pick one up and *become* a red bee, a carrot, a bottle of milk, or a clown. Ghosts, goblins, witches, frogs, tigers, elephants and lions, dragons and octopi, turtles, birds, butterflies. When the action gets going, the masks can be dropped. Leave them around where children can pick them up and improvise on their own. (See Figure 18.10)

Masks

Let children know that masks are a part of our cultural heritage. Post pictures or have open books on book stands with pictures of African masks and masks of Northwest Indians. Let children take pride in the cultural achievements of their forebearers, whatever their roots.

Hats

Hats are wonderful, too, for inspiring movement and dance. In addition to the bunny hat, how about a turkey hat, a tricorn hat,

DRAMATIC BODY MASKS

Stimulate movement and dance

- foods
- flowers
- animals
- story characters
- holiday figures

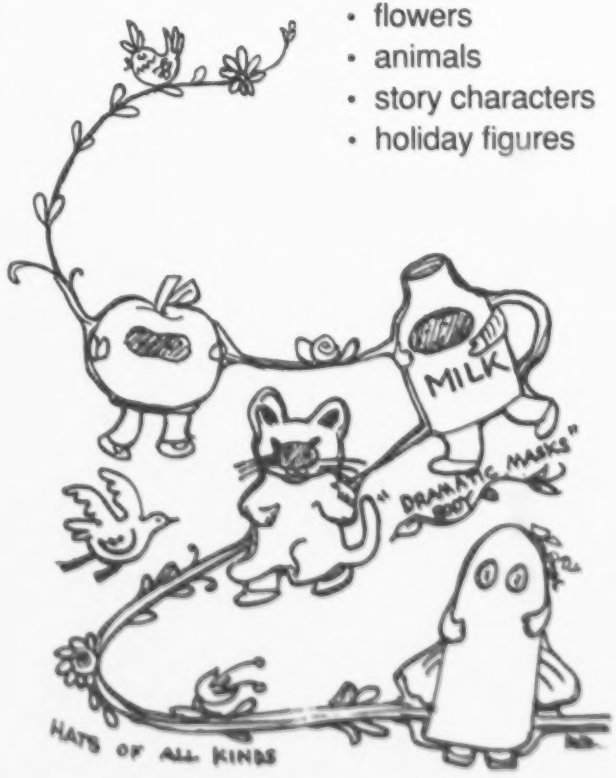


Figure 18.10

pilgrim hats, Indian headband, valentine, pirate's hat, girl's bonnet, deer antlers, St. Patrick's Day, messenger, policeman, etc.? (Figure 18.8)

A tri-corn in red, white, and blue can be used with three songs and with a drum, a flag, and a cymbal for the patriotic month of February. (Figure 18.11)

Movement From Famous Paintings

Use famous paintings from *all* cultures to inspire movement: yarn paintings of Huichol Indians from Mexico, full of symbols, full of movement with bird figures, snake dancers, giant bees, guns, stars, flowers — lines coming out of mouths. These fantasy creatures are interacting — talking, singing, humming.

It is very important to expose children to the folk art which comes from their people. Be aware of the ethnic groups in your center and vicinity and get magazines from their cultures, picture books, songbooks, music, and dances. Invite artists to come in and share. You will enrich your program immeasurably.

Chinese, East Indian, Puerto Rican, Mexican, African, Korean — all of them. This is the time for children to gain an appreciation for all cultures before discrimination has a chance to begin. Sing their folksongs! Dance to their music! Let all the children shine!

The paintings of Chagall, a Russian Jewish artist, thrill with rhythm, and color, with floating weightlessness and fluidity of movement as seen in his "Nighttime Carnival." Children can bring a Chagall painting like this to life — moving to their interpretations of its magical characters. A wonderful follow-up is to paint pictures using the same colors as Chagall used in his painting.

Everything is moving in the Henri Rousseau painting, "Storm in the Jungle" — the sky, the grasses, the leaves, branches. It makes you want to *be* everything in it and dance to its mood. Children can take turns *being* the tiger, and walking out of the painting. How would he move? Other children might be the various grasses and weeds, the trees.

Just the opposite is the quiet scene of "The Holy Night" by Horace Pippin, a black painter. With what movement would each animal rise from its spot. How would it move around in the picture?

You could do a whole program bringing famous paintings to life. (They do this at the Laguna Festival of Arts in California, and people pay $30-$50 a ticket to see it.)

Keep an area where you can display art prints of famous painters. Say the name of the artist and the name of the work often. Children will soon remember. Show a great variety, from cave paintings to the

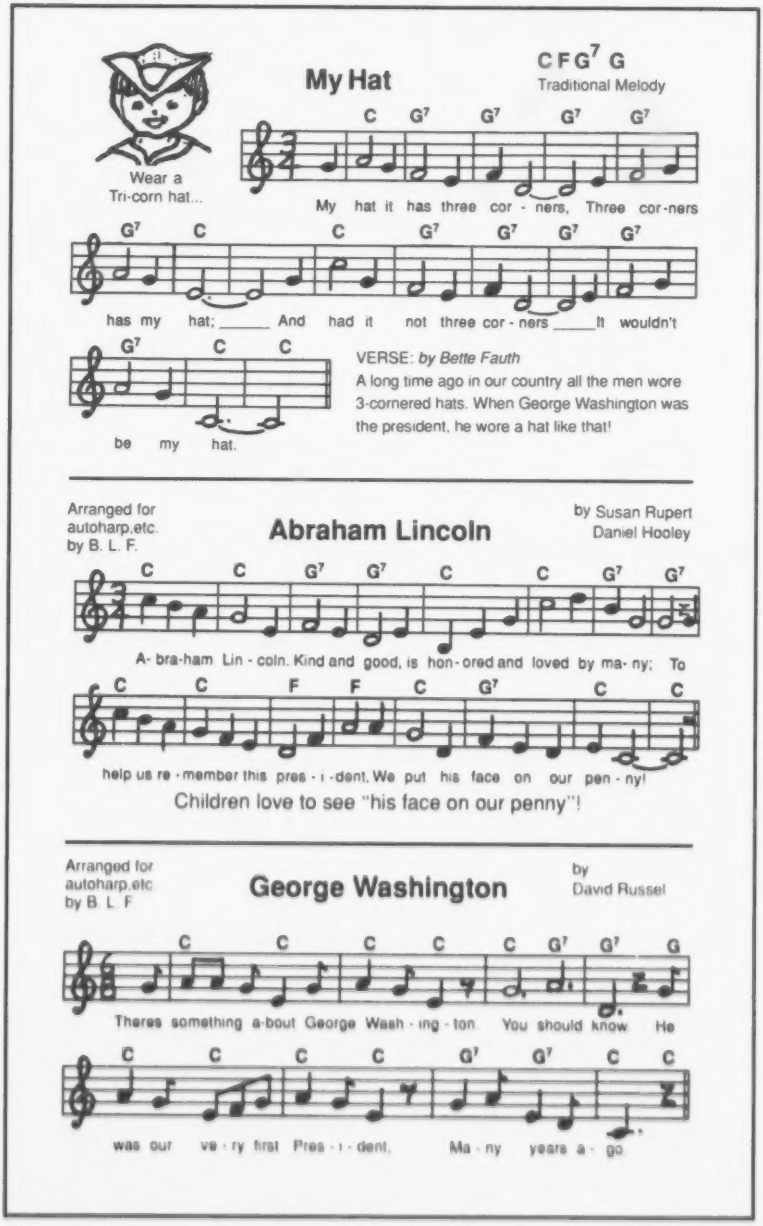

My Hat
C F G7 G
Traditional Melody
Wear a Tri-corn hat...
My hat it has three cor - ners, Three cor-ners
has my hat; _____ And had it not three cor - ners ____ It wouldn't
be my hat.
VERSE: by Bette Fauth
A long time ago in our country all the men wore 3-cornered hats. When George Washington was the president, he wore a hat like that!
Arranged for autoharp,etc. by B. L. F.
Abraham Lincoln
by Susan Rupert Daniel Hooley
A- bra-ham Lin - coln. Kind and good, is hon - ored and loved by ma- ny; To
help us re - member this pres - i - dent, We put his face on our pen - ny!
Children love to see "his face on our penny"!
Arranged for autoharp,etc. by B. L. F.
George Washington
by David Russel
Theres something a-bout George Wash - ing - ton You should know He
was our ve - ry first Pres - i - dent, Ma - ny years a - go

Figure 18.11

present day. Show one or two at a time, and repeat them from time to time.

Nothing is more important than a child's feeling of self worth. Often our children are coming to us these days with very meagre backgrounds, few enriched experiences, and very limited vocabularies. Anything we can do to nurture and help the child feel he/she is valuable and noticed has to be done and done often. They are hungry to feel their own deeper selves recognized.

Use the child's name many times a day. Sing chants and songs using the children's names. (Figure 18.12, 18.13.)

To make a child feel special, something that worked well for me was "I" name tags. I made them when the children first came into the program, but anytime will do. They are portraits. Some of you think, "I can't draw. (Figure 18.14) It takes too long." These are done in seconds. They are for teachers and aids who *can't* draw.

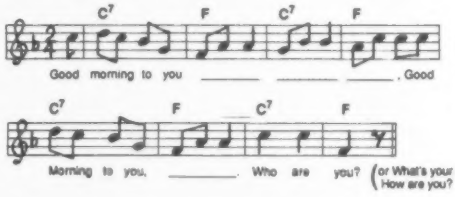
What a feeling of elation it gives a child to have someone actually sit and look at him — one to one — and make his picture. Through these the children learn each others' names quickly. The tie-in with these and movement and dance is that children *do* better, are *freer*, take more risk if they feel *good* about themselves.

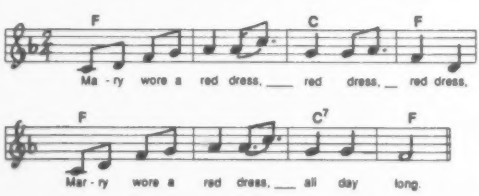
The Art Dance

What could be a better linking of dance and art than an Art Dance! I saw it first at Emanu El Nursery School, San Bernardino, directed by Clare Cherry, their talented nursery school director, writer, artist. She uses a limited supply of materials, large sizes of paper on the floor, spacious working areas, freedom to be close together or far apart, and the freedom to change activities at any time. There is a general atmosphere of gaiety and abandon. Varieties of music are played — Chinese, Peruvian, Mideastern, folk, and classical. The purpose is to produce a general overall growth in sensory awareness as body, mind, and media all flow together.

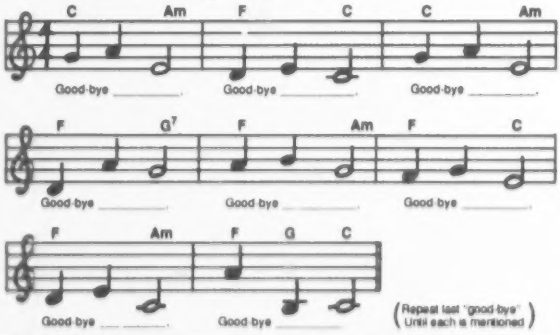
The children are told: "You may take off your shoes." "You can use any of the things you see around the room. Listen to the music, make up an art dance, and while you're dancing, I'll look into your faces, and then I'll know how you feel. You may use paints, the crayons, the chalks, the glue, or the musical instruments. You may use any of the pieces of paper, but you must share everything, and you must take turns. Paint, color, glue, dance, sing — you may do them anytime you feel like it, and anyway you like to do them."

CHANTS & SONGS USING NAMES

Good Morning (A good tune for many "songs")!

USE: names: Samuel, etc.
little boy, little girl,
Mrs. Carmen, etc.
_____
use own words.

Mary Wore (or Wears or Has) A Red Dress

USE OTHER WORDS
Who wears a _____?
Jenny wears a _____.
Who has a blue dress?
___ " " " " ?
Who has a new baby?
___ " " " " ?

Good Bye Song adapted from Edna G. Battolph

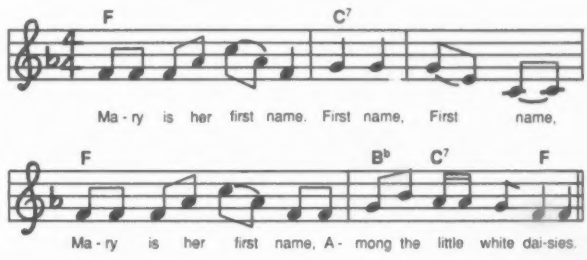

C Am F C C Am
Good-bye _____. Good-bye _____. Good-bye _____.
F G7 F Am F C
Good-bye _____. Good-bye _____. Good-bye _____.
F Am F G C
Good-bye _____. Good-bye _____. (Repeat last "good-bye" Until each is mentioned)

TO THE TUNE OF "PAN PAW PATCH":
"Where, oh, where is sweet little Maria ___?"
handsome Johnny ___?"
pretty _____?" etc.

Figure 18.2

C chord throughout...

TO THE TUNE OF "FRERE JACQUES":

"Who is Mary?" (answer) "I am Mary."
"Who is Bill?" "I am Bill
"Who is Fernando?" "I am Fernando."

F
C7
Ma - ry is her first name. First name, First name,
F
B♭
C7
F
Ma - ry is her first name, A - mong the little white dai-sies.
Rodriguez is her last name, etc.

To the RHYTHYM of "Hickory Dickory Dock:"

	Jim-my	oh,	Jim-my	hel-	lo
Hel-	lo	Hel-	lo	hel-	lo
How	do	you	do?	How	do you do?
	Jim-my	oh,	Jim-my	hel	lo.

tap it out slap it out (on your knees)
clap it out sing it out
beat it out skip it out
walk it out

— H. Cornelia HoRender

Use names and/or motions to "Michael, Row the Boat Ashore . . ."

"Johnnie Benson, how are you? Hallelujah."
"Lenny Werner, where are you? Hallelujah."
"Heather Richman, touch your toes, Hallelujah."
"Nadine Malcolm, sway and dance. Halleulujah."

Figure 18.13

"I" NAME TAGS

Use with "Songs Using Names"

FASTEN YARN AT DOTS

MARK DOTTED LINES FOR EYES AND MOUTH.

EYES ARE $\frac{1}{2}$ WAY BETWEEN TOP OF HEAD AND CHIN!

MOUTH IS $\frac{1}{2}$ WAY BETWEEN

EYES AND CHIN

Make several templates so aides and volunteers may help. It works better to use oak tag.

This section is cut out of template so line of chin may be drawn. Do not cut out of ones you make

Basic template for TEACHER and AIDE use only!

NOTE: This adapts very well for Paper Bag Puppets. (See Puppet page, Children) or use for stick puppets. Try a flip puppet with a crying smiling side or angry happy side.

PROCEDURE: FOR USING NAME TAGS:

1. Trace lightly ahead of time in pencil as many as needed. 9 X 12 neutral color, cream manila or white

2. **SIT WITH CHILD AS YOU WORK.**

Use crayon on its side to do skin color: yellow ochre brown, tan, very light black, peach

3. **TALK** as you work . . . about the eye color, hair color, cheek color, etc.

4. Quickly imitate hair style. "and he has curly black hair . . ." "and Sue has pretty orange hair — and a big pink bow!" . . .

5. Imitate neckline of shirt, dress, blouse "and you have 3 little red heart buttons! 1 - 2 - 3!"

6. Letter in name of child as you spell it and say it "J - O - S - E. Jose! That's YOU!"

Figure 18.14

This is not saying: "Do anything you *want to*." This leads to confusion and uncertainty. The limits are clearly defined. The only adult assistance is running the record player.

Sometimes the visual art comes first before the drama or dance, but sometimes the art activity follows the drama.

Another art project that combines well with a movement activity is to have the children draw self-portraits, "I" pictures. (9 x 12 or 12 x 18 paper is good for drawing.)

After the work is completed, have the children dance and move — calling attention to stretching, bending, rolling, twisting, all the movements you see them doing. Encourage them to stretch *high*, bend *low*, letting them feel the "pull and push." Immediately after the dance, have them draw themselves again, but *this* time, draw themselves dancing and moving. And see the difference! Call attention to how it felt. "How high did your leg go up? How far did you reach?" It is an experience such as this that creates a more dramatic way of drawing, a departure from the same old way the child usually draws himself.

These pictures make a wonderful "movement" book. Try it accordion book style. (Figure 18.15) Accordion books can be leafed through as an ordinary book or set up as a display.

The new Visual and Performing Arts curriculum for K-12 for the State of California pushes to integrate the four arts disciplines into the core curriculum — dance, drama, music, and visual arts. This is hopeful.

Harry Broudy, in an address to music educators said: "What a culture deems important, it enshrines in art. The origin of the tribe, its gods, tragedies, and victories, are transformed into images through legends, drama, sculpture, architecture, song, dance, and story....These are the memories of the culture."

Figure 18.15

BIBLIOGRAPHY

Broudy, Harry S. (1984). *A rationale for the arts as a general education.* Address: Summer Institute for Educators, Music Center Education Division, Los Angeles.

Cherry, Clare. (1968). *Creative art for the developing child.* Palo Alto, CA: Fearon Publishers.

Cherry, Clare. *Creative movement for the developing child.* Palo Alto, CA: Fearon Publishers.

Clark, Carol E. *Rhythmic activities for the classroom.* Dansville, NY: Instructor Publications, Inc.

D'Amico, Victor. (1960). *Experiments in creative art teaching.* Museum of Modern Art. New York: Doubleday & Co., Inc.

Lowenfeld, Viktor & Brittain, W. Lambert. (1975) *Creative and mental growth,* 6th ed., Macmillan Publishing Co., Inc.

McCaslin, Nellie. *Creative dramatics in the classroom.*David McKay Co., Inc.

Chapter 19

Dance as a Multicultural Education for Young Children

Hooshang Bagheri

Experiencing dance has been a multicultural education for me since I was a little boy in Iran. Ethnic dance has helped me develop sensitivity to my inner self and the people around me. It also has helped me to feel comfortable and to feel an insider with people from around the world. I have always enjoyed connecting, creating, and celebrating with people from diverse cross-cultural backgrounds.

Therefore, in this article — which is based upon my experience of presenting a workshop on "Dance as Multicultural Education for Young Children," at the International Early Childhood Conference in Washington, D.C., December 3, 1988 — I would like to share the activities of that session with you.

Iranian Background

I was born and raised in Iran until I finished high school. There are many different scattered subcultures — Kurd, Lur, Armenian, Persian, Turk, Arab, Azari, Bakhtiari, Baluchi, and Ghashghaei — living in Iran. They are the basic blocks of Iranian culture, and for centuries they have been trying to maintain their unique identities. Even though they are forced to speak Farsi, the national language of Iran, they have managed to maintain their own languages, beliefs, ceremonies, costumes, music, and especially dance.

My family lived in Tehran — the capital city of Iran. My father was a translator and played the violin. My mother, a housewife, played the "tar," a plucked Iranian string instrument. My sister played the

"santur," an Iranian string instrument, with a trapezoidal wooden box similar to a hammer zither. My brother, an elementary school teacher, played the Persian drum called "tunback." My grandmother, two aunts and two cousins were also living with us in the same household and constituted my extended family.

My nuclear family members were very much involved with practicing and performing music. In addition, because of my father's fame as an inventor and musician, our weekly gatherings were filled with those relatives and friends who were either artists or art lovers. There were always musicians, singers, poets, and dancers among us. Sharing through the arts, particularly music and dance, was a way of life for my family and instilled in me a sense of the close connection between music and dance with feelings of warmth and community.

Prior to age 10, my dance experience was more cultural than formal. In our family gatherings during my early childhood, adults would dance with me either by carrying me on their shoulders or in their arms. I remember watching the adults doing solo or group dances. I remember imitating their gestures or sometimes following their rhythmical patterns by just walking behind them. I enjoyed feeling connected to the group, even though I did not know any dance steps.

My family traveled a few times a year to different parts of the country. Each time we spent a few weeks in a village with friends or relatives and took part in their daily activities — getting supplies from the farm or borrowing from neighbors, shopping from the only store 10 miles away, and washing vegetables in the river with grandparents while listening to their stories. We cooked with women, sat on the floor around a large rectangular cloth eating with the whole extended family, and then took an afternoon nap. During nap time children would hear stories told by grandparents.

I attended public school in Iran. There were basically no arts in the curriculum. Textbooks, written and published in Tehran, were shipped to every place in the country. No matter what your language or subculture, you had to go through a formally prescribed curriculum. The scope and sequence for each course of study was pre-established by the Board of Education, "vezarat-e-farhang," and every teacher had to take students through textbook pages using the best methods that they knew. That usually meant lectures with the teacher being the sole source of knowledge.

Only one teacher had a major impact upon my interest in multicultural education. He was from Kermanshah, the western part of Iran. We spent much time studying native nomads and subcultures such as Kurd, Lur, and Armenian. He took an active role in teaching us and learning from us. As a part of our studies we investigated the

particular art, music, and ethnic dance of these people. I will always remember the day when 12 of us performed two folk dances for the entire school. There may be some truth to the following Chinese proverb:

I hear and I forget
I see and I remember
I do and I understand.

In summary, I feel that my Iranian cultural background has had a great impact upon my interest in dance education. Music played an important role in connecting my family members. Subcultures, each with their unique characteristics, beliefs, costumes, languages, dance styles, and forms, gave me examples of unity and community connection. Public schools, with no music, dance, or creative teaching, indirectly helped me to remain interested in, and thirsty for, these ingredients of life.

American Education

I came to America, after high school, to become either a physician or an engineer — other professions were not popular in Iran. Because of the love that I had for my niece and nephew, who were 2 and 5, and living in Iran at that time, I found myself going to the curriculum library and writing extensive letters to them with pictures and diagrams. I also used this letter approach to teach them from a distance the letters of the English alphabet, words, numerals, numbers, and simple arithmetic problems. Before long I found myself attracted to early childhood and elementary education as a major.

I was fortunate enough to take a few folk dance courses with Linda Hearn, a superb dance teacher, and to have a chance to perform with the Dobre Folk Dance Ensemble while I was a student at the University of Oregon. This was the first time that I learned folk dances by listening to instructions and watching a demonstration simultaneously. The verbal part of the instruction distracted me. I flashed back to my experience of learning to folk dance in Iran. Learning to dance evolved naturally by feeling the music in the setting, moving with the music, watching the dance leader, and by joining the dancers. I do not remember any folk dancer verbally teaching steps or attaching names to steps, except when dance was taught in a studio for business or performing purpose.

Unlike my previous experience, the primary focus of the American instruction was on learning the dance steps without the music. In most recreational settings, ethnic dance was usually taught by teachers who had very little feeling for the represented culture. It was very sad to see ethnic dance being taught as a recreational activity without a cultural connection. For subcultures that I experienced, connection between people was more important than correct steps. It seems to me that in American education we have a tendency to dissect, analyze, and label a little too much and too soon. We try to be more scientific and technical, rather that artistic, in our approach to learning and teaching. As a result, since learning the specific parts takes so much attention and energy, the purpose and the whole picture is often lost in the process. We sometimes forget what is important to learn or teach.

After graduation from the University of Oregon, I taught third, fourth, and fifth graders in Oregon, and preschoolers in New York. I learned more about the reality inside public schools in America. I was surprised to find out that with all the availability of technology, media, and management techniques that I had learned through my courses at the University, my teaching life did not become any easier. Simply, there was not enough time to cover all those materials which were assigned to us through the scope and sequence of textbooks and state guidelines. When I was teaching fourth grade, days were not long enough to finish the segmented subjects required of me: reading, spelling, writing, math, science, health, social studies, English, art, and sometimes physical education and music.

I was rushed and frustrated. It felt like closing one book and opening another. I spent most of my time managing time, materials, space, and children, rather than teaching and getting them excited about learning. Instead of using time to enjoy understanding a concept peacefully, I nervously rushed to get through and to cover the materials. Then, one day, an exciting event happened in my science class. We were supposed to study a unit on energy and force. We began our unit by making a paper airplane. I simply put the kids in small groups, gave each group a few sheets of 8.5 x 11 inch paper, and challenged them to make an airplane that could fly the farthest.

That session was fun. I found movement to be an important element of, or at least a vehicle for, active learning. The children were more involved when they were engaged with materials and a problem. It seemed to me that it was easier to manage them when I let them move rather than nailing them to their desks with a pile of paper-pencil work. I discovered that management can mean directing rather than controlling their energy. This insight gave a new direction to my life. I knew that I had to incorporate movement wisely in my curriculum.

Summary

My Iranian education, particularly in the arts, led me to believe in the importance of establishing the cultural context and teaching through osmosis. My American education, particularly in dance, motivated me further to believe in the use of the creative process in my own work. Therefore with a strong belief in the value of dance as multicultural education, and much interest in the use of my background from the two cultures I presented at the following workshop.

WORKSHOP
Dance as Multicultural Education for Young Children

The workshop was focused on how to adapt and use stories from other cultures as an effective tool to stimulate children to move, dance, think, cooperate, and at the same time learn about that culture. Participants were provided with an opportunity to hear a folktale, express it in movement and dance using ethnic music and gestures, sequence and anticipate events, and finally discuss dance as a way of discovering other cultures. I believe that in preschool, the teacher is the curriculum, and teaching is an act of integrating and creating.

How to Create a Cross-Cultural Session;

1. Choose a folktale dear to your heart;
2. Find ethnic music dear to the characters in the story;
3. Attend the movement elements of the folk culture presented in the story;
4. Integrate music and the movement elements in the story;
5. Serve it to young children with enthusiasm and celebrate the cultural diversity.

Example:

1. *A Middle Eastern Folktale: Synopsis and Creation*

SYNOPSIS: Upon his return from India, Kaveh, the King of Persia, finds his people very unhappy. He announces awards for anyone who can help to bring joy to his gray kingdom. Three wizards — a Persian, a Spaniard, and a Turk, use their magic power and bring blue, yellow, and red to this kingdom. But people are still unhappy. Finally, an ordinary person from India shares the wise power of the previously named wizards and brings many colors to that land. At the end, people and the king happily celebrate cultural diversity and call their land "The Kingdom of Rainbow."

2. *Follow Up Activity: Middle Eastern Tessellation*

Kaveh has just three crayons — a blue, a yellow, and a red one. He decided to color a middle eastern art (tessellation). He colored the

Characters	*Color*	*Movement Attitude*	*Cultural Attitude*	*Music*
The King				
People	Grey	Earthbound	Hands: Center & Up	Indian
First Wizard	Blue	Free Flow	Arms/Hips: Circular	Persian
Second Wizard	Yellow	Bound	Hips/Hands: Side to Side	Spanish
Third Wizard	Red	Light	Arms/Fists: Side to Side	Turkish
The Unknown Person	All	Choice	Choice	Indian

TABLE 19.1 Celebrate the Cultural Diversity

three alternating petals blue, yellow, and red, respectively. This was not the kind of flower he wanted. He wanted a flower with six colors — possibly green, orange, and purple petals as well. (Figure 19.1)

Can you color the way he did — with blue, yellow, and red crayons?

Now, can you solve Kaveh's problem, using only the three crayons — blue, yellow, and red? (Figure 19.2)

3. *Other Related Activities:*

- Identify and name various colors;
- Match and sort colors using objects;

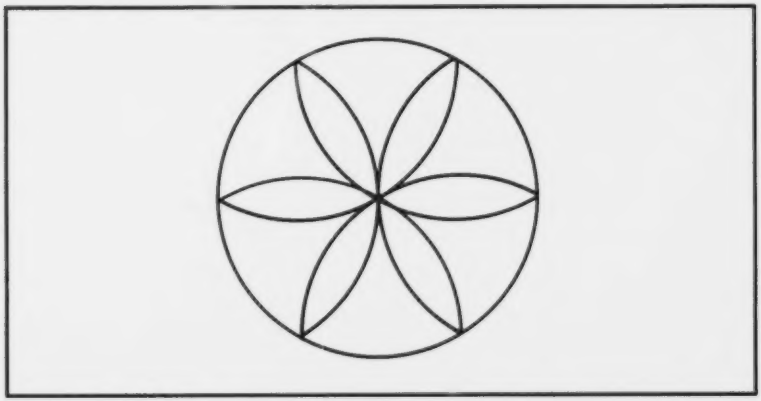


Figure 19.1

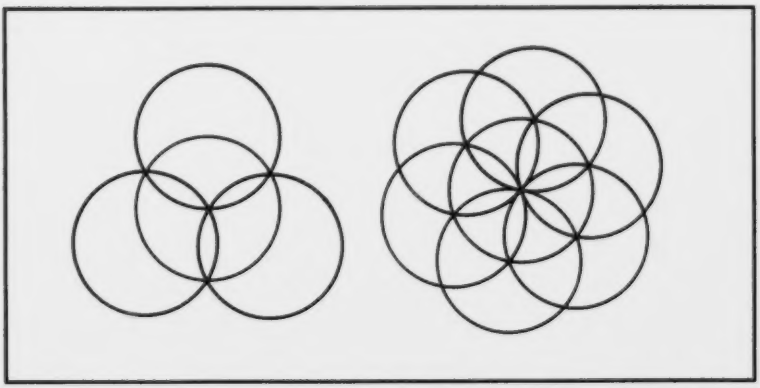


Figure 19.2

- Search for color:
  a) Can you find an object in the room with blue and yellow in it?
  b) Give children a magazine or a catalog and have them cut out an example of each color.
  c) Describe an object in the room and have children name its color when they find it.
- Understand primary colors:
  Give a variety of experiences with objects labeled blue. Next day choose a different color.
- Understand the effect of light on colors:
  Have children compare blue objects outdoors in the sun and

indoors in the shade. Talk about their observations. Have them look at the same blue object under two different light sources and compare.

- Make simple patterns:
  Use colored beads and a shoelace to make a necklace. Have them describe it.
- Go on a nature hunt for colors.
  Have children collect objects, and classify or sequence them according to a color.
- Make masks:
  Make a mask out of colored cellophane and observe objects through it.
- Understand secondary colors:
  Produce them one at a time by mixing two primary colors, and talk about them. A small glass of water, food colors, and medicine droppers can lead to nice discoveries. Finger painting is also a nice way for mixing colors. You may wish to sing the following song to them:

FINGER PAINTING
I took a blob of blue,
And then I took a blob of red,
And I swished and squashed them
All around, as far
As they would spread.
My red and blue began to change,
And much to my surprise —
Those colors turned to purple
Right before my very eyes!
Linda Brown

- Understand the effect of quantity:
  Have them find out the relationship of number of drops used and the final result.
- Understand the effect of overlapping materials:
  Use bright plastic on cardboard or on an overhead projector and describe the result.
- Understand the effect of different backgrounds on our perception.
  Have the children choose one color, for example blue, and use it on different colored backgrounds.
- Understand color design:
  Have them blow a drop of tempera paint with a straw and create designs.

4. *Cultural Activities:*

- Lead children to find out in how many ways they are similar
- Lead children to identify two ways they are different from one another
- Have them bring and share an adult from their home.
- Have them bring a colorful object from their culture and talk about it.
- Have them make jewelry and art projects using colors and designs from other cultures.
- Make foods from a culture, and eat it the way the people from that culture would.
- Celebrate the holidays or important events from around the world.

Super Sources

Shops:

Children Books and Music Center
2500 Santa Monica Blvd.
Santa Monica, CA

Dancer's Shop
Children's Music Center
5373 W. Pico Blvd.
Los Angeles, CA 90019

RCA Victor Records
155 E. 24th Street
New York, NY 10011

Storytelling:

Applebee, Arthur N. (1978). *Child's concept of story: ages two to seventeen.* Chicago: University of Chicago Press.

Farrell, Catharine H. (1983). *Word weaving: A guide to storytelling.* San Francisco, CA: Zellerback Family Fund.

Livo, Norma S. and Rietz, Sandra N. (1986). *Storytelling: Process and practice.* Libraries Unlimited, Inc.

Norton, Donna. (1983). *Through the eyes of a child: Introduction to children's literature.* Columbus, OH: Charles E. Merrill Publishing Co.

Paulin, Mary Ann. (1982). *Creative uses of children's literature.* Library Professional Publication.

Yolen, Jane. (1987). *Touch magic.* Philomel Books.

Dance and Culture:

Brown, Linda. (1980). *Sing a song of colors.* Charlotte, NC: Shoestring Publications.

Chenfeld, M.B. (1976). "Moving moment for wiggly Kids." *Phi Delta Kappan, 58,* 261-264.

Cochran, Norman A. (1976). *Learning on the move: An activity guide for preschool parents and teachers.* Dubuque, IA: Kendall/Hunt.

Hirsch, Eric D. (Jr.) (1985). Cultural Literacy and the Schools, *American Educator,* 9, No. 2, 8-15.

Hughes, Russell M. (1977). *Dance out the answer, an autobiography.* New York: M. Dekker.

Joyce, Mary. (1980). *First steps in teaching creative dance to children.* California : Mayfield Publishing Co.

McNeill, E., Allen, J., Schmidt, V. (1981). *Cultural awareness for young children.* Dallas, TX: The Learning Tree.

Russell, J. (1975). *Creative movement and dance for children.* London: MacDonald & Evans.

Stinson, Sue (1988). *Dance for young children — Finding the magic in movement.* Reston, VA: The American Alliance for Health, Physical Education, Recreation, and Dance.

Vick, Marie & Cox, Rosanna M. (1970). *A collection of dances for children.* Minnesota: Burgers Publishing Co.

Folktales:

Azaad, Meyer. (1983). *The tale of ringy* (Persian). Kentucky: Mazda Publishers.

Barnes, Michael. (1982). *The blue forest.* In *Across the fence* (first grade reading textbook). Ginn and Company.

Briggs, Raymond. (1978). *The snowman.* Random House.

Brown, Margaret W. (1972). *The runaway bunny.* Harper Junior Books.

Bryan, Ashley (1980). *Beat the story — Drum, pum-pum* (Nigerian). Atheneum.

Carpenter, Frances. *Tales of a Korean grandmother.* Doubleday, 1947; Tuttle, 1972.

Ching, Annie (1979). *Birthday party (and other tales).* Berkeley: Asian American Bilingual Center.

Esphyr, Slobodkinka. (1947) *Caps for sale.* Addison-Wesley.

Gag, Wanda (1956). *Millions of cats.* New York: Scholastic, Inc.

Galdone, Paul (1973). *The three bears.* Scholastic.

Glennon, William (1969). *Ali baba and the magic cave* (Arab). Coach House.
Grimm, Jacob and Grimm, Wilhelm (1980). *The bremen town musicians.* Doubleday.
Han, Mieko (1983). *Turtle power — Vietnamese.* National Asian Center for Bilingual Education.
Keats, Ezra (1962). *The snowy day.* New York: Scholastic Book Services.
Korty, Carole (1969). *Plays from african folktales: With ideas for acting, dancing, costumes, and music.* Scribner.
Lionni, Leo. (1969). *Alexander and the wind-up mouse.* Dantheon.
Mehdevi, Anne Sinclair (1965). *Persian folk and fairy tales.* Canada: Random House.
Sendak, Maurice (1963). *Where the wild things are.* Harper Junior Books.
Thane, Adele (1967). *Plays from famous stories and fairy tales.* Plays, Inc.
Williams, Jay (1976). *Everyone knows what a dragon looks like.* Four Winds Press.
Wyndham, Robert (1982.) *Chinese mother goose rhymes.* Illustrated by Edward Young. Philomel.
Yashima, Taro (1958). *Umbrella* (Japanese) Viking.
Yashima, Mitsu and Yashima, Taro (1977). *Momo's kitten* (Japanese). Penguin.

Section V

THE YOUNG CHILD
Internationally Speaking

Chapter 20 **The States of Early Childhood Education in Canada**
Bill McLeod
Arcadia University, Nova Scotia

Chapter 21 **On Movement Education for Preschool Children in Denmark**
Lise Ahlmann
Birkerod, Denmark

Chapter 22 **Early Childhood Movement Work in England**
Marjorie Sutcliffe
North Riding College
North Yorkshire England

Chapter 23 **Early Childhood Education in Iceland**
Jonina Tryggradottir
Reykjavik, Iceland

Bill McLeod addressed, "The States of Early Childhood Education in Canada," describing the various social changes in Canadian society and how a variety of public organizations have impacted governmental policies and funding for child care programs. According to Lise Ahlmann's, "On Movement Education for Preschool Children in Denmark," movement experiences are dictated by the nature of the school attended, the kind of training which the teacher has had, and the age of the child. "Early Childhood Movement Work in England," is summarized by Marjorie Sutcliffe as a foundational subject in the national curriculum with emphasis on integrated curricular experiences and enhancing motor development of the child. Jonina

Tryggradottir's "Early Childhood Education in Iceland," relates that the national curriculum for playschool and daycares focus on the development of the total child and that movement experiences are becoming increasingly more important as a part of the total experience.

Chapter 20

The States of Early Childhood Education in Canada

Bill McLeod

The present status of early childhood education in Canada dramatically reflects the extensive efforts of numerous public organizations, which have lobbied for the past 4-5 years to have the federal government establish a national policy on child care, and provide the necessary funding for implementation of such a policy. The rationale for such lobbying stems from dramatic social changes which have taken place in Canadian society. For example, we have:

- An increase in single parent families;
- An increase in both husband and wife working;
- Greater financial burden on low income families which restricts their ability to place children in appropriate child care environments.

As a result of the extensive lobbying by public organizations at all levels of government — municipal, provincial, and federal, the Canadian Federal Government is now in the process of implementing the "National Strategy on Child Care," through the Department of Health and Welfare. This department will place $3.2 billion into a "National Child Care System" in Canada. These monies will be proportionately allocated to the provinces, and provide the opportunity for an additional 400,000 children to receive adequate and appropriate day care services. The program of allocation will take place over a 4-year period, with the ultimate goal of providing *all* children the opportunity of receiving day care service.

Child Care Initiatives Fund

Of importance to individuals involved in research, and/or the development of preschool programs or services related to child care, is the $100 million of the National Child Care Program directed for such purposes, and to be distributed over a period of 7 years. This "initiatives fund" has identified child care concerns on a priority basis which are:

1. Indian and Inuit children
2. Special Needs Children
3. Children of parents working shift work or part-time
4. Children of minority cultural background
5. Children in rural communities
6. Children requiring short-term special care
7. School-aged children.

More specifically the areas this fund would support are:

A. Demonstration Projects such as new innovative approaches to delivering child care and development of educational materials, activities, workshops, conferences, publications, and audiovisual materials.

B. Developmental Projects in the realm of workshops and conferences which will enhance professionalism in the child care field (enhance maturity of instructors).

C. Applied Research Projects which include activities like field experimental studies/exploratory investigations that enhance informational development.

Presently, across Canada, parents can select from many and varied child care programs; from the standard baby-sitting service, community programs, privately run programs, church sponsored programs, and employer sponsored programs, to provincial government subsidized programs which are directed toward children from low income families. Unfortunately, each province operates under different guidelines, and the monies they allocate for preschool child care services often fail to meet their intended purpose.

For example, in the Province of Nova Scotia there is funding provided to municipal governments through the Department of Social Services to subsidize the operation of day care centers. However, such funding is insufficient and has lead to a deterioration in program environments and the quality of instruction for preschool children. Until recently (2 years ago) anyone could start a child care/day care/preschool program in a home. However, the provincial government, in order to receive its proportionate allocation from the

National Child Care System, must now implement standard guidelines, regulations, instructional qualifications, and administrative procedures for anyone operating a child care service. These guidelines will include such things as:

1. Safety standards — fire exits, condition of buildings, etc.
2. Health standards — play areas, rest areas, washroom facilities, and food preparation which are all related to facility size and number of children involved.
3. Instructional qualifications — the instructor/child ratio is limited to 1:7. By 1990, all instructors must have a minimum of an Early Childhood Studies Diploma (a 2 year program of studies). There does exist, at present, a conflict surrounding the content of the childhood studies program necessary to attain such a diploma. The "nature-vs.-nurture" controversy surfaces and has yet to be resolved by the Department of Social Service. Unfortunately, as with many government sponsored programs, the political implications could impede an appropriate resolution to this conflict. Also, the demand for higher educational requirements results in the demand by instructors for higher salaries, better fringe benefits, etc. Thus the burden of responsibility widens further!

Regardless of the final decision, neither the "nature nor the nurture" parties advocate the importance of "motor education" in preschool curriculum content. They use varying terms such as "free play," "fine motor skill," and "gross motor skill," but demonstrate limited comprehension of their real meaning or means of practical implementation in daily activities. As a result, considerable work is still necessary to ensure that the linkage between moving and learning for preschool children becomes a viable and valuable part of their daily lives.

Chapter 21

On Movement Education for Preschool Children in Denmark

Lise Ahlmann

In Denmark the designation *education* is only used in a proper school context concerning children from the age of 7 years. Similarly, the designation *teacher* is mainly reserved for school teachers, whereas in a preschool connection, the equivalent is *pedagogue*. Neither the words *classes*, nor *classwork* are used in a preschool context, only in schools, and a pedagogue would probably never refer to his occupation as teaching. These differences in terminology probably reflect some characteristic differences in the traditional attitude toward childhood education and the educational systems in our countries.

The designation *pedagogue* in Denmark covers the professional staff working in day nurseries (for children 0-2 or 3 years), in kindergartens (for children 2, 3-6, or 7 years of age) and in youth centers, where older children can spend their mornings and afternoons, before and after school hours. For children 6-7 years old, the schools have so called kindergarten classes where they are prepared for future school work, mostly through more or less structured play activities rather than proper teaching. The staff employed in these classes can be either pedagogues or teachers.

A pedagogue pursues a 3 year study program at a special college, called a pedagogue seminarium, where the emphasis is placed on creative activities (which in the United States probably would be called the arts), developmental psychology, and pedagogical methodology. A school teacher is engaged in a 4 year study program at a different type of college, called a teacher's seminarium, where the emphasis is placed on knowledge and professional skills.

Gym, in our schools, is a compulsory part of the curriculum — usually 2 hours a week. Since all teachers do not have a proper movement education, the gym activities can be very different even within the same school. In the kindergarten colleges some kind of movement education program is in the curriculum, but it also differs from one seminarium to the other due to the freedom of method choices. In many colleges, though, the gym activities are based on the methods of the late Danish movement educator Astrid Gossel, and movement praxis is in many day care centers based upon her ideas. I shall try to explain her ideas briefly.

Astrid Gossel was born in 1891. She was originally educated as a concert pianist, but during the 1920s she became involved in pedagogical work and was early influenced by the new pedagogical currents in Denmark at that time. Through studies of children's spontaneous singing and free play activities, she became aware of the connection between song, rhythm, and movement development of small children. She made this her area of work and commitment during the 1930s when she became a part of the professional circle around the newly established "Course for Preschool Pedagogues".

In the early 1930s she was further influenced by jazz. This was an encounter with a kind of music different from European, which also indicated an entry into a culture with a totally different approach to body and movement. This may have been the starting point for Gossel's interest in the movement habits of other cultures. She often found the movement culture to be better developed and more appropriate than what is typical in our cultural sphere. Her study of foreign movement cultures contributed to the emphasis she placed on the milieu as being responsible for the development of human movement habits, with a corresponding responsibility placed on parents and educators. Gossel emphasized the demand that gymnastics must always be in accordance with anatomical and physiological requirements, and regarded the knowledge of the structure and function of the body as an important basis.

Her contributions are in part original theories about movement and a method for movement education. She emphasized that what she had developed was not to be regarded as a system, as this would indicate something finished and consequently closed, whereas she wanted working with movement to be a continuously developing process. She claimed this to be her reason for never having given her theories a final, written form. The little written material she left was reprinted in "The Book about Gossel" (Gyldenal, 1982). An explanation andinterpretation of her movement theories is in my book "Praxis after Gossel" (Chr. Ejlers, 1984) which may eventually be published in English.

As for her educational method, there is great difference between praxis in classes with adults, with older children, and with small children. I shall, therefore, concentrate on praxis with preschool children — the activities which Gossel herself called "directed movement play." Her superior concept was to take the starting point in the child wherever it is. The educational consequence of this is a dialogue characterized by interactional procedure with the main importance attached to the initiatives, inventions, and creations of the children. All activities are based on natural, spontaneous movement patterns of the children, with their *motivation* as prime mover or driving power.

The prime tasks of the teacher then become:

1. To create the frames within which the activities can get optimal conditions - which can inspire the children in the best possible way.
2. To take care that the activities imply sufficient variety and include all those basic movement patterns which have a developmental value.
3. To direct the activities in such a way that possible beginning faults in development can be corrected.

The frames are composed of different constituents:

1. Space — the group can be organized in different ways in relation to space: in a circle, moving from wall to wall, each in a personal space — a hoola ring, a chalk circle, related to different kinds of room dividers, etc.
2. Gadgets or tools: — rope, hoola rings, balloons, big rubber bands, sheets or parachutes, different kinds of balls, drums, and other musical instruments.
3. Rules in plays, or some kind of plot.

Improvisation and mutual inspiration play a prominent part in the activities.

Another basic concept which can be traced back to Gossel's involvement in jazz music is *rhythm*. The central view here is that rhythm is to be regarded as a basic quality of the movements of young children. This means that it is not something which should be taught, but which will further develop when given optimal conditions, and, on the other hand, can be suppressed under unfavorable cultural conditions. In this connection it should be noticed that the younger the child, the faster the natural movement rhythm. Some investigators have claimed that there is a correlation between heart rate and movement rhythm (the strokes in a common march-melody thus should correspond to the average heartbeat of men). This is a fact which is generally overlooked by teachers, and many traditional songs and song-plays for very young children are in a rhythm which is much slower than their natural movement rhythm. This often is reflected in a

certain kind of passivity on behalf of the children during these activities, in contrast to the active participation of the adults who may not even notice the low activity level of the children or interpret it as due to their general immaturity. It can be mentioned in this connection that the ethologist Esther Thelen (University of Missouri) has made some interesting studies of rhythmic stereotype movements as developmental phenomenon.

In Gossel's method, rhythm is a very important aid for motivating the children as well as for evoking certain basic movement patterns. In this connection the task of the teacher is: 1) to grasp the spontaneous rhythm of the children and to meet them there; and 2) to find the kind of rhythmic pattern which is best fitted for those movement patterns which should be evoked in the actual situation, and in relation to this, find a meaningful picture or idea which together with the rhythm can motivate the children. In this context it is an advantage if the teacher is sufficiently competent at drumming, but of course music with appropriate rhythm can also be used. In Denmark, Grethe Agatz and Lotte Kersa, both former pupils of Astrid Gossel, have composed a lot of excellent songs, songplays, and melodies for that purpose.

The children's active participation with drums and other rhythmic musical instruments is also important for promoting rhythmic development; but unfortunately, many teachers refrain from this activity, maybe for fear of losing control of the situation when a group of very small children each have their own drum or instrument.

In Gossel's method, rhythm is an important part of the pedagogical frames within which the children are encouraged to freely and creatively express themselves, to promoting their body awareness, coordination, skill development, and to strengthening their self-esteem as well as their social development.

Chapter 22

Early Childhood Movement Work in England

Marjorie Sutcliffe

In England the statutory age for starting school is 5 years old. Most children will begin at the start of the school year or the term they are 5. There is no legal requirement from the state for Local Education Authorities to provide education for younger children although most L.E.A.'s do have some provision and a specific policy for Nursery Education, for children 3-5 years of age. At present approximately 50% of children in the 3-5 age range are in some form of Nursery Education. In some areas almost 90% of children fall into this category, and in some areas only about 10% do.

Outside the state education system and outside the home, children may have opportunities to be in play groups, day nurseries and nursery centers, or in private nurseries. Opportunities for physical play and movement experiences vary greatly; outdoor play with climbing apparatus, swings, slides, and sand and water play are the most common. The space available and the weather are main factors in deciding the extent to which young children have regular physical activity and practice gross motor skills. Nursery Units set up by L.E.A.'s are sometimes separate from, but often attached to, an Infant, 5-7 years, or a Primary, 5-11 years, school. In almost all cases there is a specific outdoor play area for the 3-5 year old children. This may range from a small paved yard with a patch of grass to a large, more natural environment with trees, on even ground with a wide range of climbing and scrambling equipment, logs for balancing on, and "hiding places."

Most nurseries have some form of climbing equipment, fixed or portable, indoors or outdoors, large construction units, and wheeled toys for riding, pushing, and pulling mainly for outdoor use. In some

nurseries there are balls, bats, ropes, hoops for more manipulative skill development, and some will create a space indoors for rhythmical action games.

Children may have free or restricted access to physical play, but in only a few cases will there be any interaction between child and "teacher" other than on a safety/supervision level. The structuring of the environment or the provision of progressive movement experiences is not a common feature of many nurseries.

However, in some cases the availability of a larger indoor space in the adjacent Infant School has resulted in more regular periods of physical activity for young children. This may be in the form of locomotory, manipulative, and rhythmic work, but the use of a large apparatus for climbing, jumping, balancing, and rolling activities to develop both gross motor skills and spatial awareness is more common. A focus on developing confident movement alongside an awareness of moving safely is a main feature of the work, although many teachers are unsure whether this form of activity is really suitable for such young children.

A dominant factor in the quantity and the quality of nursery school movement experiences is the commitment of the L.E.A. and the headteacher to the value and place of gross motor activity in the education of children 3-5 years.

Once the child enters the education system at 5 years, the situation is quite different. Movement education and its place within the total education of the young child is almost universally accepted. In some schools the reception class, 4-5 years, will have a short session of P.E., 20-25 minutes every day. Many will have four sessions weekly, and almost all will have at least three.

Children have movement activities to develop basic motor skills of locomotion, stability, and manipulation, with much work based on problem solving tasks using floor space and a wide range of large apparatus. Climbing frames, climbing ropes, jumping tables of different heights, balancing benches, planks and mats arranged in different, challenging ways are a feature of almost every indoor hall for young children. The development of skillful movement patterns is closely linked with the use of movement as the outcome of cognitive processes. "Answering movement tasks" in a wide variety of ways appropriate to the situation is the approach used in gymnastic and dance work with children in the early years. The basis for this type of approach is from the work done by Rudolf Laban in viewing movement in terms of "the body, space, dynamics, and relationships".

In England, the teaching of physical education in the years 5-11 is almost always done by the class teacher, who teaches across the full

curriculum. With the younger children this integrated approach is seen as crucial; cross curricular experiences rather than differentiated subject areas being the focus for the planning and implementation of the curriculum. An interactional teaching style is the one used with young children in most cases. Movement is a natural vehicle in the early years for integrating language, mathematical, and science concepts and as part of education in and through the arts. The class teacher, knowing his/her children so well and being responsible for all areas of the child's development while in school, is considered to be the best person to teach physical education in these early years.

The training of the teachers of young children has generally provided a firm foundation of understanding and professional knowledge in the area of movement for young children. At the present time in England, all teacher education courses comprise 50% time given to a main subject e.g., mathematics or music; the remaining 50% covers all remaining subject areas and education courses, as well as work with children in schools. All students spend at least 22 weeks teaching in schools during their courses, beginning in our college within 4 weeks of starting their 1 year course.

The new degree course at North Riding College has a 30 hour Physical Education component, compared with the 90 hour course which our present "year three" students have taken. The effect this reduction in professional preparation time has on the quality of teaching and learning has yet to be seen.

We are living in interesting times in England in education as a whole, apart from the considerable changes in teacher education. The Education Reform Act of 1988 and the introduction of a national curriculum and associated methods of assessment at 7 years of age is currently the focus of much attention and debate. With "subjects," English, mathematics, and science being introduced first, one concern is that time allocated for physical education is not eroded and that the integrated nature of the curriculum is not lost. However, physical education has secured a place within the national curriculum as a foundation subject. The opportunity is there to present a coherent program of study when the National Curriculum Council focuses on physical education. We must not waste it.

While there is considerable variation in the amount of "accepted good practice" in the quality of the movement experiences which young children receive in our schools, physical education has a strong tradition in illustrating many features of an integrated curricular approach, as well as helping to develop motor skills, movement confidence, and competency.

Both educators of young children and physical educationalists are aware that they must use the current situation positively to articulate the specific role of movement experiences in the education of young children, as well as their powerful integrating potential. The high profile given to the curriculum must be seen as an invaluable opportunity for all interested parties to procure a sound, balanced program of movement for all our young children.

Chapter 23

Early Childhood Education in Iceland

Jonina Tryggradottir

In Iceland, we have two kinds of early education programs. One is what we call playschool. The program is 4 hours a day, sometimes 5, either in the morning or in the afternoon.

Children can enter playschool when they are 2 years old and stay there until they are 5-6 years old.

The other program is day care. A few of the day care centers accept very young children, even 3 months old, but most children enter these day cares at the age of 1 or 2 years. In day care, children can stay for 9 hours a day. They usually leave day care when they start school at age 6. Fifteen percent of them, however, stay in school age day care until they are 9 years old.

All of these programs are run by the county with some support from the government. Day cares and playschools are the only kind of education in Iceland that is not free of charge. The payment varies with the marital status and the economic standard of the parents. As 80% of Icelandic women work outside of the home, we don't fulfill all the demands for such institutions, so we also have some family day care.

We have had a national curriculum for the elementary school, for years, but have only had a national curriculum for playschool and day cares since 1981. The same curriculum applies to both programs. This curriculum focuses upon the whole child. It is a progressive one, based mainly on the theories of Piaget, Ericson, and Kohlberg. The curriculum is a fairly open one. It states the main developmental goals, suggesting roughly how to reach them through constructing the environment in order to provide a warm and stimulating atmosphere where, with support and guidance from adults, children can learn and grow through their own activity and play. This allows each school or

day care center a certain amount of freedom to choose and develop their own activity. As a result, the activity varies from one school to another, but not as much as you might expect in Iceland, since almost all teachers in early education get their education in the same college.

In Icelandic playschools we don't have special teachers in physical education or movement activity, art, or music. The playschool teacher does the entire curriculum herself with a teacher's aid and sometimes a student in training.

Ten years ago you could not find much organized movement activity in early educational programs in Iceland, apart from the traditional outdoor activity in the playground and perhaps some movement and drama that belonged to nursery songs. In 1979, we increased courses in motor development in our college. We also started new courses in motor activity for young children, mainly movement education. Since 1980, we have also had some inservice training for older day care and playschool teachers, and the result is slowly showing. Now you will find some prepared motor activity in most day care and playschools, in some schools only once or twice a week, but in a few schools every day.

For the last few years all new day care and playschool buildings have been designed with a special accommodation for indoor movement activity, and some of the older buildings have been reconstructed for the same purpose. This means an increasing understanding and recognition by the authorities of the importance of movement in early childhood education, so there is no reason not to be optimistic.

Section VI

THE YOUNG CHILD
Enlightening the Educational Process

Chapter 24 **Information on the Assessment of Children's Play Structures: An Administrator's View**
Lawrence D. Bruya
Washington State University

Chapter 25 **Playground Design Checklist for Play Structures**
Donna Thompson
University of Northern Iowa

Chapter 26 **Panel Discussion Highlights**

Lawrence D. Bruya's, "Information on the Assessment of Children's Play Structures: An Administrator's View," focuses on the need for safe play areas and for determining the most effective means of providing appropriate structures for educational settings. "Playground Design Checklist for Play Structures," is addressed by Donna Thompson as a means of planning and properly situating play structures for enhancing the play opportunities of young children. "Panel Discussion Highlights" is a summary of a session moderated by Barbara Willer to share the concerns of conference participants as to integrating our talents towards the process of assuring quality educational experiences for all young children.

Chapter 24

Information On the Assessment of Children's Play Structures: An Administrator's View

Lawrence D. Bruya

Unfortunately, liability has surfaced as the issue of the 1980s (Adams, 1987; Clement, 1988; Bruya & Beckwith, 1985; Bruya & Beckwith, 1988). As a person in charge of overseeing facilities, the concerns which the administrator faces involve both the safety of the players as well as the need to conduct a fiscally solvent program. With the current expansion of the literature in the area of playground design, safety, construction, and maintenance (Bowers, 1988; Beckwith, 1988; Bruya, 1988; Wortham, 1988; Thompson, 1988; Bruya, 1985), it is imperative that administrators move to preserve their facilities and programs in a manner in which the safety of children is increased.

One way in which administrators can begin to develop a system to upgrade their facilities and at the same time improve the safety of the children who play on them, is to educate themselves on the process designed to establish a developmentally sound play structure (Frost, 1988); and then to make that information available to those persons who oversee the maintenance and operation (curriculum) associated with the play structure (Sommerfeld & Dunn, 1988; Warrell, 1988; Lowe, 1988). In effect, the administrator is the overseer who must establish the program which will govern the design, construction, maintenance, and operation of the play environment for young children.

As an added part of this process, it is also very important that the administrator develop a step-by-step procedure to accomplish what

appears to be an enormous task. To deal with the difficulty of the task, a well arranged system designed to cross-check all aspects of the structure, has been formulated and is now available through the American Association for Leisure Recreation (AALR), an association of AAHPERD. In this way, administrators can assure themselves, parents, and the general public, or court system if necessary, that necessary precautions have been taken to insure the safety of the play structure.

To accomplish the goal of assisting administrators with this process, the Committee On Play (COP) has undertaken the construction of a series of quick assessments which can be used in a documentation system. One of the most important checklists from the perspective of the administrator, is the one designed specifically to meet the need to cross-check their system. The administrator's checklist (A Playstructure Documentation System to Manage Risk: Files & Folders) is arranged to be used in the office to establish a documentation system based on a system of files. The files needed to begin the documentation system are listed on a front-and-back single heavy grade paper checklist which, when laminated in plastic, will provide a long lasting record-keeping reminder. Listed in Figure 23.1 are the items and topics which are included as a part of this easy to use system.

As can be seen from a quick perusal of information found on the front-and-back checklist, it is quite extensive and inclusive. The checklist indicates that files need to be recorded in at least the following areas: 1) design, 2) purchasing, 3) installation, 4) inspection, 5) maintenance, 6) repair, 7) safety, 8) curriculum, and 9) injury occurrence.

In addition, the one page front-and-back checklist includes references to materials which elucidate nationally emerging standards. Then, at the end of the checklist, other references are provided which list information directly related to the topics recorded on the checklist. In this way, the user is given the option to fit their need for additional information to available literature on the topic.

Although the checklist is limited by what can fit on a one page checklist, other areas may need to be recorded. The nine areas that are listed will provide a fine starting point assuming that the files are kept up to date.

In addition, the AALR-COP-AAHPERD group have committed to the preparation of similar one page front-and-back checklists on several other topics. These are based on new materials published by AAHPERD (AALR), (Bruya, & Langendorfer, 1988; Bruya, 1988). They include 1) playground design checklist, 2) playground fund-raising checklist, 3) developmental benefits checklist, 4) loose parts and manipulatives checklist, 5) safety: entrapment, protrusions, & falls

AALR Playstructure Checklist

©1989 AAHPERD-AALR-COP

A Playstructure Documentation System to Manage Risk: Files & Folders

by
Lawrence D. Bruya
Washington State University

For reference to emerging National Standards for playstructure design see:

1) U.S. Consumer Product Safety Commission. (1980). *A handbook for public playground safety* (Vol 1&2). Washington DC: U.S. Government Printing Office.
2) PLAE Inc. (1986). *Play for all: Workbook*. Berkeley, Ca: author.
3) Bruya, L.D. (1988). *Play spaces for children*. Washington DC: AAHPERD, 1990 Association Drive, Reston VA 22091.

A DOCUMENTATION SYSTEM

• Design Process

- ☐ Are the qualifications of the designer on file?
- ☐ Are the parameters under which the design was developed on file?
- ☐ Is proof of adherence to design parameters on file?
- ☐ Is a rationale for why the design is safe on file?

• Purchasing Process

- ☐ Is information in the file concerning who made the decision to purchase the structure?
- ☐ Are the name, address, phone #, and comments made by a second expert designer on file?
- ☐ Is there evidence of a design review phase in the file?
- ☐ Is there evidence of educators, parents, maintenance personnel, and children review of the design in the file?

• Installation Process

- ☐ Are the name, address, phone, and contractual agreements with the installer in the file?
- ☐ Are the specifications for installation in the file?
- ☐ Are all records of installation inspection in the file?
- ☐ Is evidence of installation inspection training seminars in the file?
- ☐ Is evidence of any design changes made during installation in the file?
- ☐ Are guidelines for signing-off on the structure in the file?
- ☐ Is there evidence of final signing-off in the file?

• Inspection Process

- ☐ Is the inspection form used for regular inspection in the file?
- ☐ Is evidence in the file of inspection training seminars for inspectors?
- ☐ Is there evidence of the file of policy related to setting regular inspections?
- ☐ Is a record of all inspection dates and forms kept in the file?

Figure 23.1

• Maintenance Process

- ☐ Is a designer suggested structure maintenance schedule in the file?
- ☐ Is there evidence of a regular maintenance schedule?
- ☐ Is there a record of a safety officer assignment in the file?
- ☐ Is there evidence of work orders for maintenance in the file?
- ☐ Is there evidence of a work order follow-up procedure in the file?

• Repair Process

- ☐ Is there evidence in the file of work orders drafted by the safety officer?
- ☐ Is there evidence in the file of the capability of the work crews to repair the structure adequately, i.e., a training program?
- ☐ Is there evidence in the file of a regular process to follow-up work order repairs to insure that the problem does not reoccur?
- ☐ Is there evidence of a return to the regular maintenance after repairs?

• Safety Program

- ☐ Is there evidence in the file of the involvement of the children in establishing safety rules?
- ☐ Is there evidence in the file of integrated curriculum in the school for discussion of safety on the play structure?
- ☐ Is there evidence in the file of student, prepared school safety newsletter or magazine?
- ☐ Is there evidence in the file of parent, school administrator, and teacher support of the safety program?
- ☐ Is a copy of the warning letter sent home to each school child's parent in the file?
- ☐ Is a copy in the file of all signs posted on, or adjacent to, the playstructure (verbal & graphic instructions).

• Playstructure Curriculum

- ☐ Is a copy in the file of the curriculum used with the structure?
- ☐ Is an indication kept in the file of children being trained to select appropriate skill activities at the advanced, normal and remedial levels of activity?
- ☐ Is there evidence kept in the file of instructing children in the manner in which to safely select skill activities on the structure?

• Injury Occurrence System

- ☐ Is a record of interviews with injured child, witnesses, adult supervisors on site at the time of injury in the file?
- ☐ Is a record kept in the file indicating contact with the parents of the injured child?
- ☐ For additional information on the topics in this checklist see:

For additional information on the topics in this checklist see:

1) Bruya, L.D. & Beckwith, J. (1988). System to manage the risk of lawsuit. In Bruya, L.D. (Ed.) *Play Spaces for children*. pp. 218-243 Washington DC: AAHPERD, 1900 Association Drive, Reston VA 22091.

2) Bruya, L.D. & Beckwith, J. (Winter, 1985). Due process: Reducing exposure to liability suits and the management of risk associated with the children's play area. *Children's Environments Quarterly. 2*, 4, pp. 29-35.

3) Sommerfeld, D. & Dunn, C. (1988). Project OLE: Outdoor *Learning Environment* for children. In Bruya, L.D. (Ed.) *Play spaces for children*. pp. 166-176 Washington DC: AAHPERD, 1900 Association Drive, Reston VA 22091.

4) Lowe, P. (1988). Developing responsibility of children for playground safety. In Bruya, L.D. (Ed.) *Play spaces for children*. pp. 105-120 Washington DC: AAHPERD, 1900 Association Drive, Reston VA 22091.

Figure 23.1 continued

checklist, and 6) accessibility for play structures checklist. All the checklists are available through AALR-COP, AAHPERD, 1900 Association Drive, Reston, VA 22091. Finally, materials are becoming available which provide quick and easy checks on topics of vital interest to elementary school educators, preschool educators, parks & recreation personal, and administrators from all of these programs.

Bibliography

Adams, S. H. (1987). Liability and negligence. In Adams, S., Adrian, M. and Bayless, M. A. (Eds.) *Catastrophic injuries in sports: Avoidance strategies* pp. 3-8. Indianapolis, IN: Benchmark Press, Inc.

Beckwith, J. (1988). Playground equipment: A designer's perspective. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 49-102. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Bowers, L. (1988). Playground design: A specific approach. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 218-243. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091

Bruya, L. (1985). Design characteristics used in playgrounds for children. In Frost, J. D., and Sunderlin, S. (Eds.) *When children play* pp. 215-220. Wheaton, MD: Association for Childhood Education International, 11141 Georgia Avenue, Suite 200.

Bruya, L. D. (1988). Sand area, wading area, signs, trees, & pathways. In Bruya, L. D. and Langendorfer, S. J. (Eds.) *Where our children play: Elementary school playground equipment* pp. 133-192. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Bruya, L. D. & Beckwith, J. (Winter, 1985). Due process: Reducing exposure to liability suits and the management of risk associated with the children's play area. *Children's Environments Quarterly, 2*, 4, 29-35.

Bruya, L. D. & Beckwith, J. (1988). System to manage the risk of lawsuit. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 218-243. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Clement, A. (1987). Summary of litigation in physical education and sport. In Adams, S., Adrian, M. and Bayless, M. A. (Eds.) *Catastrophic injuries in sports: Avoidance strategies* pp. 259-264. Indianapolis, IN: Benchmark Press, Inc.

Frost, J. (1988). Child development and playgrounds. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 3-28. Washington,

DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Lowe, P. (1988). Developing responsibility of children for playground safety. In Bruya, L. D.j (Ed.) *Play spaces for children: A new beginning* pp. 105-120. Washington DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Sommerfeld, D. & Dunn, C. (1988). Project OLE: Outdoor Learning Environment for children. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 166-176. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Thompson, D. (1988). Slides, swings and climbing equipment. In Bruya, L. D. and Langendorfer, S. J. (Eds.) *Where our children play: Elementary school playground equipment* pp. 67-106. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Warrell, E. (1988). A system to establish playground safety in the school. In Bruya, L. D. (Ed.) *Play spaces for children: A new beginning* pp. 139-164. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Wortham, S. (1988). Location, assessibility, and equipment on playgrounds. In Bruya, L. D., and Langendorfer, S. J. (Eds.) *Where our children play: Elementary school playground equipment* pp. 45-66. Washington, DC: AAHPERD, 1900 Association Drive, Reston, VA 22091.

Chapter 25

Playground Design Checklist for Play Structures

Donna Thompson

Location and Accessibility

- Play equipment should be easily visible by nearby residents and/or passersby.
- A fence or wall or shrubs at least 3 feet high should surround the play equipment.
- The play equipment area should be accessible by wheelchairs by means of a hard surface.
- Wheelchairs should be able to get on some of the play equipment.

Size and Placement of the Equipment

- If equipment is designed to be separate from other pieces, there should be 10 feet of space between them.
- All concrete footings should be buried 2 inches below the surface of the ground.
- Equipment should be placed to avoid collision or interference with traffic patterns of children on wheel toys on hard surface pathways.
- Smaller sized play equipment intended for young children should be present.
- Smaller equipment should be separated from larger equipment.

Slides

- The maximum height that a slide should be from the ground is 80 inches.
- A guardrail should surround the platform area of the slide.
- The slide should be wide enough to accommodate more than one child at the same time.
- The sliding surface should be stable, smooth, and have no protrusions throughout its length.
- The angle of the slide should level off at the bottom with a 0-4 degree run-out of at least 16 inches in length.
- The total slide incline must not exceed 30 degrees.
- The bottom end of the slide should be at least 16 inches above the ground.
- The minimum depth of surfaces under a slide should be:
  Hard wood mulch: 12 inches
  Pea Gravel: 12-18 inches
  Rubber matting: 6 cm
  Sand: 12-18 inches
  Shredded Tires: 6-12 inches
  No asphalt or concrete or packed dirt should be used.
- The supporting structure should be firmly fixed into the ground including the concrete footings.
- All parts of the equipment should be present; none should be broken.
- There should be no sharp corners, edges, or projections.
- Slides designed with a wheelchair dismount area are preferred.
- Slides designed with an access ramp parallel to the slide chute are preferred.
- If stainless steel is used, it must face north, away from direct sunlight.
- If fiberglass is used, it may splinter.
- Polyethylene slides do not splinter and wet items do not freeze on them.

Swings-Standard

- There should be swings designed to accommodate young children present.
- Swings for younger children should be on a separate structure from the other swings.

- All moving parts should be in good working condition and not in danger of breaking.
- All "S" hooks must be closed.
- Chains should be covered with plastic or other material to prevent fingers being pinched in links.
- There should be no seats made of metal or wood.
- The minimum distance between each seat or stationary support must be 18 inches.
- Seats designed for proper postural support are preferred.
- Seats must be slashproof.
- Suspended masses, such as animals, must not be used unless documentation indicates that they pass the USPCSC 200G Impact Test.
- There should be no sharp corners, edges, or projections on any part of the swing seat, chains, or swing structure.
- All support structures, including concrete footings, must be firmly anchored in the ground.
- Barriers such as fences or hedges should be provided to discourage children from running into swings while they are in motion.

Swings-Tires

- Support beams must be two times the swing height plus 48 inches.
- Ball joint bearings must have at least 170 degrees of swing.
- Universal joint bearings must be covered with a durable, flexible shield.
- The minimum depth of surfaces under all swings should be:
  Hard wood mulch: 12 inches
  Pea gravel: 12 inches
  Rubber matting: 6 cm
  Sand: 12 inches
  Shredded tires: 6 inches
  No asphalt or concrete or packed dirt should be used.

Chapter 26

Panel Discussion Highlights

"Making It Happen: Action Steps for Implementation"

Presider: Barbara Willer, NAEYC

Panel: Dollie Wolverton, Head Start
Bob Ritson, COPEC
Sue Stinson, NDA

Opening Comments:

Describing stereotypes in physical education: jock, sports-oriented, competitive. Describing stereotypes in early childhood teachers: free play, playground, standing, watching. Some stereotypes are a reality.

Integrating movement and early childhood — need to work together.

Topics To Be Addressed In The Discussion:

A. Professional Practice: Are Teachers Prepared?
B. Policy: What Are in Place and Need To Be in Place?
C. Parents & Public: What Is It That Parents Want? Do They Want Activities That Are Not Developmentally Appropriate?

Impediments To Developmentally Appropriate Approaches And Programs:

Sue Stinson — Stereotype attitude regarding what dance is. Many adults have lost touch with the child within themselves.

Bob Ritson — Unfair stereotype with physical education content. Look at concepts that physical educators emphasize. Child should drive the curriculum.

Audience

- Teachers sharing with each other their own ideas.
- Parent expectations: children should come away with specific identifiable skills.
- Environments for movement and play are not always acceptable.
- Communication with specialty areas collaboration.
- Classroom teachers that are responsible for providing movement and motor development programs are not always prepared.
- Commercial day care centers need to hire people who are trained in motor development and the arts into their programs — certified professionals.
- There is a multi-faceted arrangement of licensing and certification for day care and preschool; different agencies and government regulations are not always the same.
- Cultural pressure of "number one" — who is it?
- Professional preparation needs to change the attitude of early childhood educators to the positive approach to physical education — "not the gym program memories of their youth."
- Some professionals lose sight of what they are there for (not just the job, but for children).
- Funding is limited for equipment that supports good appropriate programs.

Now We Can....

- Take time to reflect on what happens at the conference.
- What do we bring to the conference from our background?
- Smaller state conferences bringing the early childhood movement and arts together.
- Reaching out within local communities.
- Each conference attendee takes personal responsibility to make "connections."
- We have heard a number of barriers, but we can look for ways to build bridges, make connections. We can make a difference, make the world a better place for ourselves and children. Where there is a will, there is a way.

Section VII

THE YOUNG CHILD
Our Challenge

Chapter 27 Moving and Learning: Linkages that Last
David L. Gallahue
Indiana University

David Gallahue was given the challenge of delivering a closing keynote address based upon the conference presentations and the thoughts created through the interaction and involvement of the conferees. "Moving and Learning: Linkages that Last," relates the importance of a child-centered approach to learning and the contributions that we as educators can make in shaping the child's total development. We can and do make a difference.

Chapter 27

Moving and Learning: Linkages that Last

David L. Gallahue

Good morning! At your table there is a packet of materials containing several key rings, light chain, and pieces of colored tape. Please distribute the packet, and take hold of a key ring. This ring will symbolize the young child, the young child as a moving, learning, thinking, and feeling being.

Today we are going to talk about the child, our relationship to all children. We are educators. We are care givers. We work with all types of children. As Carol Seefeldt, our first keynote speaker, reminded us in quoting Charles Dickens: "It is the best of times and it is the worst of times." Daily, each of us faces numerous challenges with our children. These challenges frequently extend far beyond moving to learn and learning to move. They involve the development of real life skills, of learning how to live in a society that to many has become increasingly hostile a society that has seen an alarming rise in racism, sexism, and classism. Truly, you and I have an opportunity to help make this the best of times for the child. We were reminded that only 20% of the children eligible for Head Start are actually involved in Head Start programs. We are further reminded that more than 70% who drop out, are kicked out, fail a grade, or never complete their high school education. Today, the sad statistic is that in many of our large cities, up to 60% never complete their high school education. Certainly this is the best of times, but for them it is also the worst of times.

We can make a real difference in the lives of the children we touch. The primary thread through this conference has been that the *child* must be at the center of the educational process. The *child* must be the focus of what we do, and of what we are about as educators. That is

why each of us is here today. Our motivation for attending this conference was not for the extra days off, or for the opportunity to visit Washington D.C. We came here to learn, to rekindle our dedication and our enthusiasm for the important job that we do.

Tomorrow the sun will come up, and our children will be eagerly waiting for us to fill their day. Each of us will approach them from a different point of view. As physical educators, some of us will approach them primarily from the standpoint of *learning to move*. As early childhood educators, some of us will approach primarily from the standpoint of *moving to learn*. The fact is, however, that we are all dealing with the same child. We may be approaching the child from different directions, but we are all coming toward the child in ways that can and do make a significant impact on his or her development.

Although it is both the best of times and the worst of times, we were reminded by Jenni Klein, our second keynote speaker, not to focus on early childhood education as a quick fix for the problems of education and the problems of society in general. As teachers, we simply cannot do it all. We can, however, begin!

Perhaps, the way to begin is by looking at the concept of literacy. If we ascribe to the word "literacy" as meaning "to be knowledgeable or to be educated," then perhaps that is what each of us as teachers of young children is really trying to do whether we are physical education teachers or classroom teachers. We are all involved in the process of literacy, of helping the child become knowledgeable and educated.

Those of us who are physical educators are concerned with children's literacy primarily, but not exclusively, through the development of *movement literacy* and *fitness literacy*. We are, however, also concerned with moving to learn and contributing to the child's *cognitive literacy* and *affective literacy*, which is the primary responsibility of the classroom teacher. The classroom teacher is also concerned with learning to move and contributing to movement literacy and fitness literacy. (Figure 27.1)

If we are truly committed to developing the literate child, then we must recognize that literacy takes many forms and can be developed through a variety of means. We were challenged in the keynote address by Lolas Halverson, to bridge the gap between what we know about development in children and what we know about teacher behavior. A skillful mover is not developed solely through the process of maturation. As we were reminded in the presentation by Jane Clark, Martin Block, and Lynnette Overby, assessment of the young child reveals that maturation alone does not account for the development of mature fundamental movement skills. Environmental factors such as

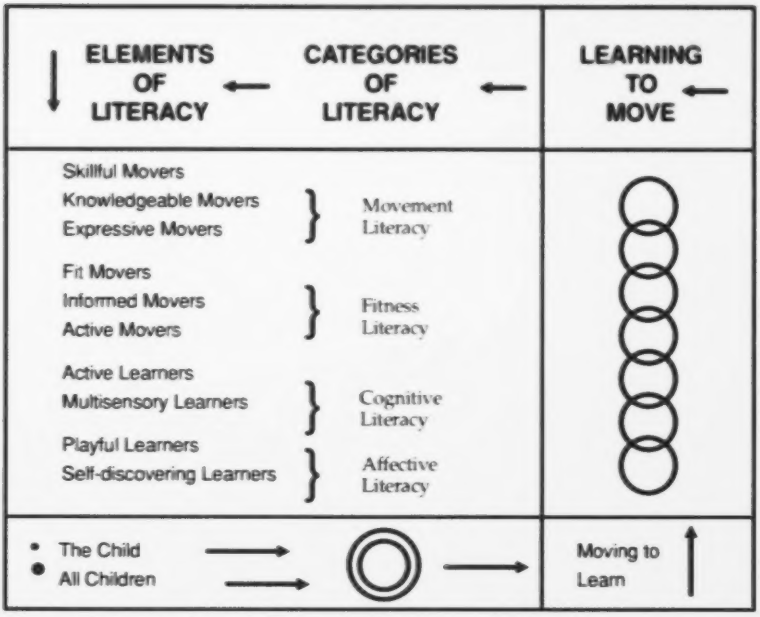


Figure 27.1 Moving and Learning: Linkages that Last

opportunities for practice, encouragement, and instruction are critical to developing children's fundamental movement skills. It is not enough merely to provide opportunities for practice, although practice is important. Nor is it sufficient to provide simply encouragement, although encouragement is important. Similarly, it is not enough to provide only directed instruction, although instruction is important. The combination of the three environmental variables of opportunities for practice, encouragement, and instruction, has been a consistent theme throughout our discussions. The message has been: If we are truly to develop skillful movers, then we must incorporate all three into the lives of children. Learning to move cannot be left to chance. As educators of young children, whether we are preschool teachers or physical education teachers, we must be involved in the intimate process of helping children learn to move — to develop movement literacy by helping them become *skillful movers*.

To be literate movers children must also become *knowledgeable movers*. The presentations by Jill Whitall, Alice Honig, Elizabeth Bressan, and Greg Payne, focused on developing knowledgeable movers. For example, my wife and I raise and board horses. We can help them become skillful movers, but there is not one horse in the

barn that can become a skillful mover without the help of a trainer. So too, as we work with children and as they become skillful movers, we must be certain that they also become knowledgeable movers who will understand how their bodies can move and how they should move. These are important movement concepts and skill concepts that must be learned. We need to be certain that children become thinking knowledgeable movers, not robots producing movement patterns in specified ways, but individuals who can produce a variety of movement forms in response to the situational requirements. The presentations by Fran Cleland and Andrea Boucher were representative of this important concept. Fran focused on divergent movement and movement problem solving, and Andrea worked with several young children, each of whom was problem solving, exploring, experimenting, and discovering new ways to move. Each was deeply engrossed in the process of becoming a knowledgeable mover.

The literate mover is also an *expressive mover*. As we recall the eloquent presentation by Sue Stinson, we were reminded about the "inner child." The inner child is within each of us, and frequently "dies" as we become adults. However, the inner child need not die for us to move into adulthood. Perhaps the reason why many of us are teachers of young children is because of the quest to keep our own inner child alive. The idea of being an expressive mover was brought out in many of the sessions. Carolyn Tate's presentation and several others focused on being an expressive, feeling, thinking mover. The presentations by Sharon McColl and Bette Fauth dealt with movement as an art form and the importance of being able to express, manipulate, and vary one's movement patterns under a variety of conditions.

In summary, if we are truly concerned with the global concept of literacy, then we must also be concerned with developing children's movement literacy. Much of what has been said the past 2 days has focused on learning to move in terms of developing the Literate mover.

Our sessions have also focused on the area of *fitness literacy*. (The term fitness literacy is credited to Wynn Updyke, Indiana University). Those who attended Lee Allsbrook's session were thrilled by his dynamic style of presentation, but more importantly, by the content in terms of developing the fit mover. Once again, I can get my horses fit, just as fit as can be, but there is not a horse in the stable that knows how to get itself fit. In other words, we must develop fit movers, yes, but we also must develop *informed movers*. We heard through Lee's presentation, and several others, that young learners become knowledgeable about their bodies and how they work. It is not important for 3-, 4- or 5-year olds to know the origin, action, and insertion of the various muscles. It is important, however, for them to

know that various muscle groups serve various functions, that these muscles are strengthened with use, and that fitness is an important contributor to good health. Fitness, nutrition, and even stress control are important knowledge for the young child. Jerome Bruner once made a statement to the effect that if something is educationally worth imparting, it can be imparted in some intellectually respectable form at any age. The burden is then on us as educators to be knowledgeable individuals in the area of fitness. It challenges us to be able to take important fitness concepts and transmit them in an educationally and developmentally sound manner to our 3-, 4- and 5- year olds.

The final aspect of fitness literacy deals with children as *active movers*. Jenni Klein's presentation, and several others, focused on children as active movers. Movement is their whole way of being. Frequently, however, the active movers of childhood become the sedentary "couch potatoes" of adulthood. Children, as naturally active movers, need to be channeled into vigorous physical activity and encouraged to be active movers for a lifetime.

One of the beautiful things about this conference has been the marriage of several organizations that deal with the young child, but approach the child from different points of view. In fact, in planning this conference, considerable discussion took place concerning an appropriate title. It is interesting to note that the NAEYC representative, Barbara Willer, would place the emphasis on the "learning and moving" aspect, as would Dollie Wolverton and Mary Lewis, the Head Start representatives, while the physical education representatives, Shirley Holt/Hale and Margie Hanson, would emphasize the reverse; "moving and learning". The group actually debated whether the conference title should be "learning and moving" or "moving and learning." It soon become evident, that it really did not make a difference.

As educators of young children we are all concerned with *cognitive literacy* — not cognitive literacy in terms of learning to read at age 3, or 4, but cognitive literacy from the standpoint of developing essential readiness skills and recognizing that young children are active learners and multisensory learners.

Children are *active learners*. Movement is a primary means by which they gain information about their bodies and the world around them. The work of Jean Piaget reveals that movement is an important facilitator of cognitive development. Those who had the opportunity to attend Hooshang Bagheri's presentation, saw an emphasis on multicultural learning through dance, in which he focused on developing cognitive understandings through movement, creative expression, and dance. The idea of children as active learners was an

important thread through most of the presentations.

Children are also *multisensory learners*. Craig Buschner's presentation stressed that because children are multisensory learners, movement can be used as an effective learning tool. Movement can be used as a means of reaching and teaching young children. Maida Riggs' inspirational slide presentation vividly depicted the young child as a multisensory learner, an active learner climbing, hanging, swinging, running, jumping, throwing, and catching, a learner constantly engrossed in the sheer joy of learning through movement.

There are two critical aspects of *affective literacy*. Children are playful learners and they are also self-discovering learners. As playful learners, we were reminded in presentations by Cosby Rogers, Donna Thompson, Larry Bruya, and Lou Bowers about the importance of play in the life of the young child. Play is not the work of the child. It is the life of the child. Ask a child, "What did you do today," and the response will most often be, "I played." Play does not need defense. Play does not need explanation. Play in and of itself is valid! Children, and hopefully we as adults, are playful learners. Hopefully, the child within us has not died. Hopefully, we still enjoy the mirth, the joy, and the sheer pleasure of play for its own sake.

Finally, several sessions dealt with the child as a *self-discovering learner*. Children are constantly learning about themselves. They are *learning* to be at home with who they are. Ambrose Brazelton's unique presentation focused on the notion that "I am somebody; I count; I make a difference." Mark Harvey spoke about tapping the inner rhythm of children, of helping them find their inner self. The development of a stable, positive self-concept is essential to the total development of the child. It is a common thread that runs through all good teaching, whether we are early childhood educators, or physical educators. Perhaps the common thread that runs through all we do with the young child can be summed up in our dealings with the child as a self-discovering learner.

It doesn't really matter if we come at the child with the idea of "moving to learn" or "learning to move." Both tap into the child! As educators we all have the tools, the opportunity, and the responsibility to reach and teach the total child. We have the unique challenge of developing the literate child from the standpoint of movement literacy, fitness literacy, cognitive literacy, and affective literacy.

You are the key to developing the literate child! You unlock the doors of literacy for the young child! We all make a difference, not just as individuals, but collectively as educators intimately involved in the development of our children. Through moving and learning, we truly have linkages that last!

Perhaps these linkages that last may be summed up in the following poem (Gallahue, 1988):

As teachers, we have the greatest gift to give the children
A positive self-concept.
We can do this by treating them as though they were already what they could only hope to become.
By letting them, through our eyes, see themselves as competent, worthy, and in control of their destiny.
By giving them direction to their longings, and leaving them with the conviction that their fates can be molded by their hopes and deeds.
That their lives need not be shaped by accident.
That their happiness does not depend upon happenstance.
We can introduce them to themselves by allowing them to learn who they are and what they can be.
If we do this, they will no longer be strangers to themselves, they will be at home in the world.

Appendix A

International Early Childhood Conference

"Forging the Linkage Between Moving and Learning for Preschool Children"

Hyatt Regency Hotel (Crystal City)
Washington, D.C.
December 1-4, 1988

DECEMBER 1, 1988 - THURSDAY

4:00-9:00 p.m. - REGISTRATION

Hyatt Regency

6:00-8:00 p.m. - RESOURCE CENTER

See packet for separate schedule of research and programs displays

Books and T-shirts for sale; program displays, research sessions, films.

Not open during Conference Program Sessions

8:00-9:00 p.m. - FIRST GENERAL SESSION

Opening:

Shirley Ann Holt/Hale, Conference Director,
Linden Elementary School,
Oak Ridge, Tennessee.

Acknowledgements:

AAHPERD:	Margie R. Hanson Elementary Ed., Consultant
NAEYC:	Barbara Miller, Dir. of Information Services
HEADSTART:	Dollie Wolverton, Chief, Education Services
NASPE:	David Gallahue, President Elect
COPEC/NASPE:	Bob Ritson, Chair of the Council
NDA:	Lynnette Overby, Board of Directors
AALR:	Barbara Sampson, Executive Director
ICHPER:	Carl Troester, Executive Secretary

Welcome:

Elizabeth Ussery, Associate Commissioner, Head Start Bureau, Administration for Children, Youth and Families, Office of Human Development Services, DHHS, Washington, D.C.

Keynote Address:

Children and Families in Today's Society
Carol Seefeldt, Institute of Human Studies, University of Maryland, College Park

Visual: Slide Presentation

Childhood and Movement
Maida Riggs, Professor Emeritus, Physical Education, University of Massachusetts, Amherst

9:00 p.m. - RECEPTION

Open to all Conference Participants
Cash Bar and Complimentary Hor d'oeuvres

DECEMBER 2, 1988 - FRIDAY

8:00-10:00 a.m. - REGISTRATION

9:00-10:00 a.m. - SECOND GENERAL SESSION:

FOCUS: YOUNG CHILDREN AS ACTIVE LEADERS

Keynote: Children and Learning

Jenni Klein, Sr. Advisor to President High/Scope Educational Research Foundation and Early Childhood Consultant Formerly with the Family Head Start Bureau

10:00-10:30 a.m. - BREAK

10:30-11:15 a.m. - FEATURED TOPICS:

1. "Movement Education and the Development of Children's Decision-Making Abilities"
   Elizabeth Bressan, University of Oregon, Eugene
2. "Can We Help Children Move and Think Critically?"
   Craig Buschner, University of Southern Mississippi, Hattiesburg
3. How Many Ways Can I . . .?
   Movement Problem Solving; Fran Cleland, Indiana University Bloomington (Audience Participation)
4. Baby Movers: Relation to Learning
   Alice S. Honig, Syracuse University, New York
5. The Development of Self-Esteem in Children
   Ambrose Brazelton, Retired from Ohio State Department of Education
6. The Importance of Play
   Cosby S. Rogers, Virginia Polytechnic Institute, Blacksburg

11:30-12:15 p.m. - FEATURED TOPICS REPEATED

12:15-2:00 p.m. - LUNCH ON YOUR OWN

(nice buffet served in Cinnabar, Hyatt)

Resource Center Open

2:00-3:00 p.m. - THIRD GENERAL SESSION

FOCUS: PHYSICAL EDUCATION:
THE FORGOTTEN ASPECT OF EARLY CHILDHOOD EDUCATION

Keynote:

"Motor Development of Young Children"
Lolas E. Halverson, University of Wisconsin, Madison

3:00-3:30 p.m. - BREAK

3:30-4:15 p.m. - FEATURED TOPICS:

1. A Dynamic Approach to Motor Development Applying New Theory to Practice, Jill Whitall, University of Wisconsin, Madison
2. Observing and Facilitating Skill Sequencing V. Gregory Payne, San Jose State University, California
3. Appropriate Movement Activities for Young Children, Andrea Boucher, Towson State University, Maryland
4. Physical Fitness for Young Children Lee Allsbrook, Middle Tennessee State University, Murfreesboro (Audience Participation)
5. The Assessment of Motor Skills in Young Children Jane E. Clark & Martin E. Block, University of Maryland, College Park; Lynnette Y. Overby, Howard University, Washington, D.C.
6. Children with Special Needs: Mainstreaming and Movement; *Regency F*, Eleanore Grater Lewis, New England Resource Access Project, Newton, Massachusetts

4:30-5:15 p.m. - FEATURED TOPICS REPEATED

5:30-6:30 p.m. - SOCIAL HOUR

Cash Bar and Complimentary hot and cold Hors d'oeuvres. We hope this will encourage you to stay through the early evening session.
Resource Room Open

Special Presentation by "Slim Goodbody" (John Burstein)

FRIDAY EVENING

6:30-7:30 p.m. - FEATURED TOPICS (Simultaneous)

1. The AALR-AAHPERD Committee on Play Projects:

Larry Bruya, Washington St. Univ. - Pullman Current Information on Assessing Children's Environment

Donna Thompson, Univ. Northern Iowa, Cedar Falls; The Play Structure Provided for Children in Parks

Lou Bowers, Univ. of South Florida, Tampa
The Results of the Assessment of Elementary School Yard Structures

2. ICHPER - International Panel on Education for Very Young Children:

Moderator: Margie Hanson

Canada - Bill McLeod, Acadia University
Denmark - Lisa Ahmann, Birkerod
England - Marjorie Sutcliffe
North Riding College, North Yorkshire
Iceland - Jonina Tryggradottir, Reykjavik

7:30 p.m. - DINNER ON YOUR OWN

DECEMBER 3, 1988 - SATURDAY

8:00-10:00 a.m. - REGISTRATION

9:00-10:00 a.m. - FOURTH GENERAL SESSION

FOCUS: DANCE: BRINGING MOVEMENT AS ART INTO THE EARLY CHILDHOOD CURRICULUM

Keynote:

Dance and the Developing Child, Susan W. Stinson, University of North Carolina, Greensboro

10:00-10:30 a.m. - BREAK

10:30-11:15 a.m. - FEATURED TOPICS:

1. Linking the Visual Arts with Drama and Movement for the Young Child, Bette Fauth, Early Childhood Consultant, California
2. Linking Music, Art, Drama, and Dance for Young Children, Sharon McColl, Oklahoma State Department of Education

3. Meeting Special Needs through Dance, Carol Penn, Penn Visions Inc., Washington, D.C.

4. Creative Movement: Focusing on the Preschool Child, Carolyn M. Tate, Dance Specialist, Maryland National Park and Planning Commission, Prince Georges County (Audience Participation) SATURDAY CONTINUED

5. Dance as Multicultural Education for Young Children, Hooshang Bagheri, California State University, Northridge (Audience Participation)

6. Tapping the Internal Rhythm of Young Children Mark L. Harvey, Metropolitan State College, Colorado (Audience Participation)

11:30-12:15 p.m. - FEATURED TOPICS REPEATED

12:15-2:00 p.m. - LUNCH ON YOUR OWN

Resource Center Open

2:00-4:00 p.m. - FIFTH GENERAL SESSION

FOCUS: THE CHILD AS AN ENERGETIC, MOVING LEARNER

PANEL: MAKING IT HAPPEN: ACTION STEPS FOR IMPLEMENTATION
Panel discussion with audience participation to map out strategies and policies to assure programs that foster the development of children as energetic and moving learners

Moderator: Barbara Willer, Director of Information Services and Public Policy, NAEYC

Jenni Klein - Early Childhood Consultant and Sr. Advisor to President, High Scope Foundation

Dollie Wolverton - Chief Education Services, Head Start Program

Bob Ritson - Physical Education Director State Dept. Education Oregon; Chair Council on Physical Education for Children

Sue Stinson - University of North Carolina, Greensboro
NDA Commission on Children's Dance

4:00 p.m. - FREE EVENING

DECEMBER 4, 1988 - SUNDAY

8:30-9:30 a.m. - CONTINENTAL BREAKFAST

(Included in registration fee)
Coffee, tea, juice, danish, croissants, yogurt, bagels and cream cheese

9:45-11:00 a.m. - SIXTH GENERAL SESSION

Keynote:

Moving and Learning: Linkages that Last
David L. Gallahue, Indiana University, Bloomington, Indiana

Closing Remarks: Shirley Ann Hol:/Hale

11:00 a.m. CLOSE

Appendix B

International Early Childhood Conference

Crystal City, Washington, D.C.
December 1-4, 1988

Research Poster Presentations

Assessment of children risk-taking behavior as reflected in motor activity
Hezkiah Aharoni, SPECTRA Associates, Columbus, OH

Comparison of motor development in preschool age children
Judy Bohren, University of Tampa

The evaluation of motor development of kindergarten children in Mississippi
Gloria C. Correro, Mississippi State University

Teacher effectiveness training and its impact on the academic learning time of preschool children in physical education
Tommy Foster, University of S. Mississippi

Body composition and flexibility among prepubescent males and females
Carl Gabbard, Texas A & M University

Children, games, and prosocial behavior: Insight and connections
Steve Grineski, Morehead State University

Teaching professionals effective methods of education
Linda A. Hartung

The effects of a development movement program on preschool Down's Syndrome children
Karen Kurz-McPherson, San Diego State University

Physical activity patterns and intensity levels of preschool children

Donna Hester, University of Alabama at Birmingham

Movement activities and motor development programs in selected day care and preschool centers in California 1987
Dennies L. T. Barber, Pasadena City College

The DFW Metroplex schoolyard and parks playground structure assessment
Lawrence D. Bruya, Washington State University

The 4-P motor development curriculum for Ohio Head Start agencies
Stephen Langendorfer, Kent State University

Implications of proprioceptive screening tests of 5 and 6 year old children
Billye A. Cheatum, Western Michigan University

The development of fundamental motor skills in 3 to 5 year old children
Bill McLeod, Acadia University

The effects of a prescriptive individualized program and a nonprescriptive group task program on fundamental motor pattern and ability acquisition, self-concept, and socialization of kindergarten children
Steve W. Moyer, Eastern Michigan University

Physical activity patterns of preschool children
Catherine A. Poest, University of Akron

Appendix C

International Early Childhood Conference

December 1-4, 1988
Hyatt Regency Hotel (Crystal City), Washington, D.C.

PROGRAM DISPLAYS

SMART (preschool movement program)

Donna Hester
Donna Dunaway
University of Alabama
Birmingham, Alabama 35294
(205) 934-2446

KINDERSKILLS (preschool motor development program)

Linda M. Carson
284 Coliseum
School of Physical Education
West Virginia University
Morgantown, WV 26506-6116
(304) 293-4812

ACADIA KINDERSKILLS MOTOR DEVELOPMENT PROGRAM

Bill McLeod
Acadia University
Wolfville, Nova Scotia
Canada, BOP 1X0
542-2201, Ext. 559

THE MOVE TO LEARN TO GROW PROGRAM

Bill Stinson
Box 20, HPERD
Emporia State University
Emporia, KS 66801
(316) 343-1200, Ext. 5354

MOTOR BEHAVIOR CENTER

Jane Moore/Gil Reeve
Auburn University
Auburn, Alabama 36849-5323
(205) 826-4483

NANCY CONKLE

Austin Independent School District
2007 McCall Rd.
Austin, TX 78701

MOVING AND LEARNING

(The Movement Education Specialists)
c/o Rae Pica
109 Berry River Road
Rochester, New Hampshire 03867
(603) 332-6917

GERSTUNG INTER-SPORT

Siegried Gerstung
6310 Blair Hill Lane
Baltimore, MD 21209
(216) 661-9988

THE SUNFLOWER YOGA COMPANY

Sarabess Forster
Wendy Zeroth
1305 Chalmers Road
Silver Spring, MD 20903
(301) 445-3382

KALEIDOSCOPE

Ann Green Gilbert
11051 34th Avenue, North East
Seattle, Washington 98125
(206) 363-7281

GYMNASTICS FOR PRESCHOOLERS AND PHYSICAL EDUCATION MAJORS

Josey Templeton
Mississippi State University
Mississippi State, MS 39762

Appendix D

International Early Childhood Conference

Washington, D.C.
December 1-4, 1988

BIOGRAPHIES OF PRESENTERS

LEE ALLSBROOK

Lee Allsbrook is an elementary physical education specialist and assistant professor at Middle Tennessee State University in Murfreesboro, Tennessee. While teaching preschool physical education methods classes, he also continues to have daily teaching contact with preschool and elementary school age children.

Mr. Allsbrook has conducted youth fitness workshops and clinics in more than 40 states as a clinician for the President's Council on Physical Fitness and Sports. Demonstrating his own interest in fitness, Lee has run 47 marathons and finished the World Ironman Triathlon Championship three times.

HOOSHANG BAGHERI

Hooshang Bagheri, Ph.D. in Early Childhood Education from the University of Oregon, a former preschool and primary grade teacher, is on the faculty of Elementary Education at California State University-Northridge. He has lived and taught in Tehran, Bombay, Baghdad, Oregon, New York, Pennsylvania, Virginia, and North Carolina. Because of his varied cultural background and special interest in ethnic dance and music, he enjoys exploring ways to use creative dance and music as a multicultural approach in education of children.

MARTIN E. BLOCK

Martin E. Block is a doctoral student at the University of Maryland-College Park. A former Adapted Physical Education

Specialist in Virginia, he is presently the Director of Motor Activities Programs for the Special Olympics as well as Director of Adapted Physical Education at Ivymount School in Rockville, Maryland. Mr. Block received his B.A. from Guilford College and his M.A. from Ohio State University. His current research focuses on the motor control and coordination of Down's Syndrome children.

ANDREA BOUCHER

Andrea Boucher is an Associate Professor of Physical Education in the Department of Physical Education at Towson State University in Baltimore, Maryland. Dr. Boucher was formerly an early childhood classroom teacher in both her native country of Australia and Canada. As a physical education specialist teacher of young children she has conducted courses and workshops in England, Mexico, Canada, Australia, and the United States. Dr. Boucher received her undergraduate education at the University of Adelaide & Western Teachers College, Australia; her M.Ed. at Western Washington University; and her Ph.D. from the Institute of Child Study, Department of Human Development, University of Maryland-College Park. Dr. Boucher is the Eastern Representative on the Executive Committee for the Council of Physical Education for Children of the National Association for Sport and Physical Education (AAHPERD).

LOU BOWERS

Dr. Lou Bowers is a professor of Physical Education at the University of South Florida, Tampa. He has been with the university for 22 years; 10 of them as a professor. Dr. Bowers' primary interest has been the motor development of young children with emphasis on the needs of handicapped children. Dr. Bowers also designs and evaluates developmental play and equipment centers for preschool children. He received his Masters degree from the University of Maryland in Physical Education and his Ph.D. from Louisiana State University in Physical Education and Psychology.

AMBROSE E. BRAZELTON

Ambrose Brazelton, retired from the Ohio Department of Education in December 1978. He was Executive Secretary of the Ohio HPERD for several years and has served as keynote speaker or session presenter for innumerable physical education conventions throughout the United States and Canada. Publications under his authorship include *Body Jive, Only Just Begun, And The Beat Goes On,* and *Clap Snap and Zap,* record albums with special focus on activities for elementary school children. "Braz" advocates vigorously for a humanized physical

education program featuring: 1) de-emphasis of teacher-imposed classroom competition, 2) elimination of activities which use students as targets, and 3) inside and outside learning laboratories (gyms and playgrounds) adorned with teaching/learning aids, stations and relevant creative graphics painted on floors, hard tops, and walls, and 4) activities carefully geared to the growth and development characteristics of children.

ELIZABETH S. BRESSAN

Elizabeth Bressan is an Associate Professor of Physical Education at the University of Oregon. She has taught elementary school physical education, as well as worked in professional preparation programs for teachers. She received her B.S. and M.S. degrees from the University of North Carolina at Greensboro, and her Ph.D. from the University of Southern California. Her current research is focused on curriculum designs for children's physical education that develop self-confidence in moving, and promote positive social interaction skills.

CRAIG BUSCHNER

Craig Buschner is an Associate Professor of Physical Education at the University of Southern Mississippi in Hattiesburg, Mississippi. He has taught elementary physical education, conducted a movement experiences program on campus, and continues to work with children at Sacred Heart School. Dr. Buschner received his B.S. degree from Virginia Commonwealth University, M.S. from Western Illinois University, and Ed.D. from Oklahoma State University. His research interests are in the area of teacher behavior and writes in the area of physical education for children. He is a native of the Washington, D.C. metropolitan area.

JANE E. CLARK

Jane E. Clark is an Associate Professor of Physical Education at the University of Maryland, College Park. The co-editor of the annual series *Advances in Motor Development Research*, she is not only an active researcher in the area of motor development, but a regular provider of workshops and clinics for preschool teachers. Dr. Clark received her B.S. from the State University of New York-Brockport, her M.S. from the University of Washington and her Ph.D. from the University of Wisconsin-Madison. Her current work focuses on the development of interlimb coordination.

FRAN CLELAND

Fran Cleland is a doctoral candidate in Motor Development and Adapted Physical Education at Indiana University where she serves as a visiting lecturer. Fran has an undergraduate degree in Physical Education from Purdue University and a master's degree from Indiana University. Prior to pursuing her graduate studies, Fran taught physical education for 10 years in Indiana, Virginia, and Oregon, and has an interest in studying the developmental aspects of motor creativity which is the focus of her doctoral dissertation.

BETTE FAUTH

Bette Fauth is Associate Professor of Art, Emeritus at Riverside College, California. Her educational background includes a master's degree in art from Claremont Graduate School, California and advanced study at New York University, as well as in Mexico and Florence, Italy. Her many honors and achievements include television specials, faculty lectures, grants and research in art from other cultures, solo shows, and permanent collections. She has worked with children's theatre and with deaf and aurally handicapped children. She is an artist and an educator.

DAVID L. GALLAHUE

David Gallahue is a professor of Physical Education at Indiana University-Bloomington. In addition to writing several books including *Understanding Motor Development in Young Children and Motor Development and Movement Experiences for Young Children*, he has written many articles and has been a Consultant/Author on Pre-School and Early Childhood for TIME/LIFE BOOKS, INC. As a lecturer and visiting professor, he has given numerous presentations and workshops on physical education and motor development of young children both nationally and internationally which include the countries of Bahrain, Iran, Brazil, Canada, Kuwait, and Egypt. He has done presentations for NAEYC and Head Start and is a Past Chairman of Council on Physical Education for Children and President-Elect for the National Association for Sport & Physical Education. Dr. Gallahue earned his Ed.D. degree at Temple University.

LOLAS E. HALVERSON

Lolas E. Halverson is a Professor Emerita of Physical Education in the Department of Physical Education and Dance at the University of Wisconsin-Madison. She has taught in the preschool, elementary school and at the university levels. Dr. Halverson received her B.A. degree from Northern Iowa University and her M.S. and Ph.D. from

the University of Wisconsin-Madison. She conducts research on motor development across the lifespan.

MARGIE R. HANSON

In 1965, after teaching several years at the elementary and college levels, Margie Hanson became the Consultant for Children's Programs in movement and dance for the American Alliance for Health, Physical Education, Recreation, and Dance. Still in that position, she has conducted workshops, consulted on curriculum, authored many articles and made numerous presentations in the United States and abroad. Dr. Hanson has been a consultant to the Peace Corps in Costa Rica, to elementary teachers in Iran, and has made presentations in England and Canada. She has also served on the White House Committee for the International Year of the Child, has been Vice President of the Coalition for Children and Youth, a board member on the Child Development Associate Consortium, and a panel moderator for the White House Conference on Arts in Education. Her most significant contribution has been the active liaison established with several educational associations focusing on children.

SHIRLEY HOLT/HALE

Shirley Holt/Hale is a consultant on preschool education and teaches at Linden Elementary School in Oak Ridge, Tennessee. She is the co-author with George Graham of *Children Moving...1980*, and author of *On the Move*. Dr. Holt/Hale has also written and produced a video tape on elementary physical education, as well as had many articles published in various educational journals. In addition to teaching preschool at the University of Georgia, Vanderbilt and Berea, she has been a consultant for workshops on movement activities for elementary and preschool in several states and has made national presentations. As an elementary physical education specialist, in 1972, she began a development and movement education program for K-6 which later became a demonstration center in movement education. She is an adjunct professor at the University of Tennessee, was named Teacher of the Year by the Council on Physical Education for Children (COPEC), and was also State President of HPERD. Dr. Holt/Hale's B.S. degree is in elementary education with a Master's degree in physical education and a Ph.D. in early childhood.

MARK L. HARVEY

Mark Harvey is an Associate Professor of Elementary and early childhood education in the Department of Professional Studies at Metropolitan State College, Denver, Colorado. He is also the

consultant for physical education for the Colorado Department of Education. He has worked with the Chicago Public Schools Head Start program as well as early childhood programs in both Chicago and Denver. Mark received his B.S. degree from Saint Augustine College, Raleigh, North Carolina, a M.S. from George Williams College, Downers Grove, Illinois and an Ed.D. from the University of Utah in Salt Lake City. He is the coordinator of elementary physical education programs at Metropolitan State College and is involved with early childhood programs throughout the state of Colorado.

ALICE S. HONIG

Alice Honig attended Cornell University, received her B.A. (Magna Cum Laude) from Barnard College, her M.A. from Columbia University, and her Ph.D. from Syracuse University. Ms. Honig is a Professor in the Department of Child and Family Studies in the College for Human Development. She teaches courses including parenting; theories and applications for child development; and infancy and prosocial development.

For 12 years, Professor Honig was on the research staff of the Syracuse University Children's Center and Family Development Research Program. As Program Director, Dr. Honig trained testers to assess the children's progress, worked actively with teachers and with paraprofessional home visitors to program living and learning experiences for young children, and helped in the selection of evaluation measures and design.

She has published many articles and chapters. Her books include: *Parent Involvement in Early Childhood Education* (NAEYC), *Playtime Learning Games for Young Children* (S.U. Press), *Infant Caregiving: A Design for Training* (with J. R. Lally, S.U. Press), *Risk Factors in Infancy* (Gordon & Breach).

JENNI KLEIN

Jenni Klein is currently the senior advisor to the President, High/Scope Educational Research Foundation. She has been a free-lance consultant, chief of the educational branch of Head Start Bureau, a supervisor of special education, a kindergarten and nursery school teacher as well as a college professor. She holds degrees in human development/special education, early childhood education, and psychology/sociology. She has received the Outstanding Service Award from NAEYC.

ELEANORE G. LEWIS

Eleanore Lewis is currently serving as the Training Specialist for the New England Resource Access Project, Education Development Center, Inc. As such, she provides a wide range of training to Head Start programs in the six-state New England region. She is also on the faculty of Wheelock College, Boston, Massachusetts. She has published numerous articles and produced videotapes relating to children with special needs.

SHARON MCCOLL

Sharon McColl is an Artist-in-Residence for the State of Oklahoma teaching creative dance in the elementary schools. She is the Director of a preschool arts program founded at the University of Oklahoma that provides music, visual art, creative drama and dance experiences for children ages 3-5. Ms. McColl received her M.A. from Wayne State University, Detroit, Michigan, and has published many articles on Creative Dance. She has served as chairperson of the National Commission on Children's Dance for AAHPERD.

LYNNETTE Y. OVERBY

Lynnette Overby is an Assistant Professor of Physical Education at Howard University. A former Physical Education and Dance teacher in the District of Columbia Public Schools, Dr. Overby also has taught at Coppin State University and the University of Maryland. The co-editor of the annual series, *Dance: Current Selected Research*, she is an active researcher in the area of dance. Dr. Overby has her B.S. from Hampton Institute, her M.A. from George Washington University and her Ph.D. from the University of Maryland-College Park. Her current work includes investigations on the use of imagery in dancers.

V. GREGORY PAYNE

Greg Payne is an Associate Professor in the Department of Human Performance at San Jose State University in San Jose, California. He is a specialist in Motor Development and coordinates the Graduate Program. He taught primary school physical education prior to beginning his study of motor development. He also instructed methods courses for Venezuelan teachers as a Peace Corps volunteer from 1974 to 1976. He is a Fellow of the Research Consortium of the American Alliance for Health, Physical Education, Recreation, and Dance, and co-authored the text *Human Motor Development: A Lifespan Approach*. Dr. Payne received his B.S. degree from Western Illinois University, his M.A. degree from the University of Iowa, and a P.E.D. from Indiana University. His current research interests involve

children's physical fitness, electromyographic analysis of motor patterns, and the effects of physical activity on aging.

CAROL A. L. PENN

Carol Penn is the Coordinator of Project S.E.A.T. (Special Education Arts Team), District of Columbia Public Schools, and serves as the dance and creative movement teacher for that organization. Additionally, Ms. Penn is the Producing Director of Pennvisions, Inc., an organization dedicated to developing, presenting and perpetuating dance arts, and is the Artistic Director of the New Visions Dance Theater. Ms. Penn has served on the staff of Washington Very Special Arts, Trinity College Graduate Program, DC Commission on the Arts and Humanities, and the TAPESTRY and Interrelated Arts Program for Montgomery County Public Schools in Maryland. She has been the recipient of the J.F. Kennedy Center Summer Teacher Fellowship. She holds a B.S. in Dance Education and is a M.A. Candidate in Humanities at New York University, specializing in dance as a performance art for the visually impaired.

MAIDA L. RIGGS

Maida Riggs, Professor Emeritus, University of Massachusetts at Amherst, has had many years of experience observing and participating in nursery school programs in the United States, Great Britain, Holland, Germany, Australia, and the USSR. She is well known for her work on playgrounds and play spaces designed to facilitate good movement. Maida Riggs is author of *Jump for Joy*, a book on movement for preschoolers.

COSBY S. ROGERS

Cosby Rogers is an Associate Professor of Child Development in the Department of Family and Child Development at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. A former Head Start teacher/director, she has also been a 4-H Club extension agent and has taught home economics at the junior high level. Dr. Rogers received her B.S. and M.S. degrees from Virginia Polytechnic Institute and State University and her Ph.D. from the University of North Carolina at Greensboro. She conducts research on playfulness as a disposition in children.

CAROL SEEFELDT

Carol Seefeldt is Professor of Early Childhood and Child Development at the University of Maryland, where she received the Distinguished Scholar/Teacher Award. She has worked in the field for

over 30 years, teaching day care through third grades. In Florida, Dr. Seefeldt opened and directed a private preschool and served as Regional Training Officer for Head Start. She is active in the National Association for the Education of Young Children and the Association for the Childhood Education International. Her research emphasizes early childhood curriculum, intergenerational attitudes, and the effects of competition on child growth and development.

SUSAN W. STINSON

Susan Stinson is an Associate Professor of Dance at the University of North Carolina at Greensboro, where she coordinates the undergraduate and graduate dance education programs. In her career as a dance educator, she has worked with all ages - from infants through senior adults - in settings that included public and private schools, day care centers, and community agencies. Dr. Stinson received a B.A. in sociology from Hood College, an M.A. in dance education from George Washington University, and Ed.D. in Curriculum and Teaching from the University of North Carolina at Greensboro. Her work has been published in *Dance Research Journal*, *Young Children*, *Journal of Curriculum Theorizing*, *Drama/Dance*, and *Journal of Physical Education, Recreation and Dance*. Her book, *Dance for Young Children: Finding the Magic in Movement*, was published by AAHPERD in 1988.

CAROLYN M. TATE

Carolyn Tate is a specialist, consultant and teacher in creative movement and creative dance for early childhood. She currently serves as the Dance Specialist for the Maryland-National Park and Planning Commission Department of Parks and Recreation, Prince Georges County. Ms. Tate has extensive background and experience in designing and evaluating both creative dance and creative movement programs for early childhood through elementary education levels.

JILL WHITALL

Jill Whitall is a visiting Assistant Professor in the Department of Physical Education and Dance at the University of Wisconsin-Madison. She has taught physical education (K-12) in England and the United States. Dr. Whitall received her B.Ed. and M.A. degrees from the Universities of Keele and London respectively, and her Ph.D. (in motor development) from the University of Maryland. Her research interests lie in the development of coordination and control in fundamental motor skills.

BARBARA WILLER

Barbara Willer has been with NAEYC for 4 years and is the Director of Information Services and Public Policy. She also works extensively with their affiliated groups. She has taught at Indiana University Lab School and was a Newport, Kentucky Vista volunteer. Barbara earned her B.S. degree in speech from Northwestern University, her Master's degree in Child Development from Florida State University in Tallahassee and her Ph.D. in Human Development and Family Studies from Cornell.

Appendix E

Movement Programs for Young Children

A Position Paper

Developed by The Council on Physical Education for Children of the National Association for Sport and Physical Education an association of the American Alliance for Health, Physical Education, Recreation and Dance 1986

Introduction

The purpose of this position paper is to assist school personnel, community leaders, and parents in determining focus and direction as they develop programs of physical education for preschool children. This paper represents the thinking of numerous professionals in the area of preschool physical education.

In the continuing quest to make physical education experiences more relevant and personal to children, new developments in research on learning theories, curriculum content, instructional strategies and child growth and development must be constantly considered, evaluated and implemented. Since teachers play a vital role in the success of movement programs, priority should be given to employing persons with knowledge concerning children's motor development as well as cognitive and effective development. Professionals with this knowledge can design appropriate movement experiences to maximize student learning and achievement.

Purpose/Importance of Movement for Preschool Children

Play has often been termed the work of young children. It is through play that children learn to move and move to learn. For children,

movement is a critical means of non-verbal communication, expression and learning. Planned movement experiences are an integral part of the total educational program for young children. Movement serves as the basis for their psychomotor, cognitive and affective development.

Psychomotor Development

Play experiences should include activities which enhance the development of the large and small muscles of the body. Large muscle development, which is sometimes called gross motor development, should include experiences in which children execute locomotor, manipulative and stability (balance) movement patterns effectively, efficiently and under a variety of conditions.

Locomotor experiences should involve traveling or steplike actions, such as walking running, hopping, galloping and skipping, as well as rocking, rolling, and sliding actions. Manipulative experiences should involve throwing, catching, striking with and without implements, kicking and trapping or collecting actions. Stability experiences should involve balancing in a variety of shapes using different bases of support. Upright and inverted balances, static and dynamic balances and balances which involve weight transfer should also be included.

Small muscle development should include activities which involve bilateral, unilateral, lead-assist, and crosslateral actions as well as experiences for control, strength, and various eye/hand and eye/foot coordinations. Both large and small muscle experiences should range from those which are direct in order to teach a specific skill to those which are open-ended, problem solving, or exploratory in nature so as to encourage creative responses and conceptual development.

Cognitive Development

Experiences in total body movement contribute to cognitive development. As children learn the identification of body parts, how they move, and where they move, they begin to develop an understanding of body and spatial awareness. Knowledge of how the body moves develops an initial understanding of mechanical principles. Activities which involve changes in body shape and movement in different pathways, speeds, and amounts of force further increase children's cognitive base. Early opportunities for a variety of practical, concrete experiences serve to develop a sound base for the more abstract forms of later cognition. Simple experiences in answering questions and forming solutions to movement problems

can also contribute to the development of reasoning, deductive and inductive thinking.

Affective Development

Movement experiences for children should be designed to enhance self-concept. Experiences should focus on success not failure, and cooperation not competition in order to improve the image which youngsters have of themselves, of others, and of others toward them. While receiving and responding to information in an adult-directed world, experiences should also encourage independence and self-responsibility. Creativity, a sense of caring and appreciation of others and the world, are additional concepts which should be fostered in children as they begin to develop attitudes and values as well as a system for moral and ethical decision making.

Beliefs About Young Children

1. Each child is unique, with interests, needs and responses different from those of every other child. Acknowledging, respecting and planning in ways to accommodate these individual differences is important if each child is to reach his or her potential. Movement programs should be equitable for all children regardless of race, creed, gender, or handicapping conditions.

2. Children are "whole" beings who bring their thinking, feeling, and moving capacities to every task. Children and their responses are best understood in light of their wholistic nature, and movement experiences can best be planned and conducted when their potential impact upon the whole child is considered.

3. Young children have a natural curiosity and drive for independence. They seek to discover and learn on their own as they explore their environment through movement. They should be taught to set their own goals and be provided with the skills and encouragement to become increasingly independent learners.

4. Young children are free-spirited individuals who exhibit spontaneity, creativity, exuberance, and imaginative self-expression. These characteristics contribute to learning and to the enjoyment of life when fostered and channeled by teachers rather than being subdued or controlled.

5. Young children are "now" persons. Each new day must have time for the happiness and development that good movement experiences

can provide. Deferring or substituting other experiences in place of movement classes is an unfair penalty for children.

6. Young children love to move; for them, movement is an end in itself. The joy of doing, not the joy of winning, appeals to this age child. Their absorption in movement practice and play is a sign of appropriate selection and duration of learning tasks and activities.

Teachers of Young Children

Teachers of movement programs for young children should possess the following personal characteristics:

1. Good health, vitality, and enthusiasm;
2. Intelligence, creativity, and an interest in innovation;
3. Willingness to share their ideas with others;
4. Cheerfulness, sense of humor, and a playful spirit;
5. Flexibility and open-mindedness to new programs and ideas;
6. Feelings of self-worth and a valuing and enjoyment of others;
7. Belief in the dignity, worth, and individuality of each child;
8. Sensitivity, warmth, and a capacity for empathy;
9. Basic motor skills and enjoyment of movement.

Teachers of movement programs for young children should possess knowledge relative to the following:

1. Program planning and development;
2. Motor development and motor learning theory;
3. Perceptual-motor development, principles of fitness development, and movement education;
4. Teaching strategies and classroom program management;
5. Creation of learning environments, learning materials, and equipment;
6. Evaluation of motor performance, teaching effectiveness, and movement programs.

Teachers of movement programs for young children should possess the following competencies:

1. Ability to translate motor development, motor learning, and human movement theory into practice;
2. Ability to formulate objectives and plan lessons which will maximize psychomotor learning;
3. Ability to effectively organize, manage, and teach young children so that they achieve in the areas of perceptual-motor development, movement education, and fitness;

4. Ability to create learning environments, learning materials, and equipment which will enhance movement learning;
5. Ability to evaluate motor performance, teaching effectiveness, and movement programs.

Curriculum for Young Children

Perceptual-Motor Development

Perceptual-motor aspects of the program should enable children to use sensory information in the process of learning and refining motor skills. A progression of learning experiences should be provided in the categories listed below:

1. Body Image: identification of body parts, knowledge of body size;
2. Visual Perception: observational ability, visual sequential memory, visual tracking, figure-ground discrimination, visual-motor timing;
3. Auditory Perception: auditory awareness, auditory sequential memory, auditory discrimination, use of sound cues in performance;
4. Proprioception (Tactile, Vestibular, Deep Pressure, Kinesthetic Perception): proprioceptive awareness, proprioception to guide movement.

Movement Education

Games: Games for young children should focus on the development and improvement of skill in locomotion and the manipulative patterns of throwing, catching, kicking, and striking with and without implements. While stressing the process of quality movement, emphasis should be placed on learning to control one's body and objects under conditions which allow skills to be utilized in a variety of situations.

Child designed and/or teacher designed games should be governed by simple rules, maximum participation, and non-elimination. Experiences which test one's own skill, encourage cooperation with a partner or small group, and highlight self improvement rather than winning at someone else's expense should characterize children's games.

Educational Gymnastics

Gymnastics enable children to gain control over their bodies while discovering unique ways of moving alone or with others on the floor or in relation to apparatus. Gymnastics experiences should include the following themes: balancing; traveling, including locomotion, climbing, rocking, rolling, sliding, and flight; transferring weight from one adjacent body part to another; and force production and absorption, including jumping and landing.

In educational gymnastics the equipment most frequently incorporated into the lessons is small and may include items such as ropes, hoops, and wands. Apparatus is often homemade or improvised and includes wooden or plastic boxes or crates, benches, walking boards, beams, and low tables. Commercial apparatus which has been designed for children and which can be rearranged to provide a variety of challenges is also desirable.

Dance

Dance provides opportunities for interpretive, expressive, and communicative movement. Experiences in dance for children should evolve from the use of the movement elements of space, time, and force. Children should learn the relationship of self to others and to the physical environment. Creative dance experiences should include exploration, improvisation, investigation, and invention using ideas such as those associated with the movement elements, imaginary and literary sources, properties or characteristics of various plants, objects, or animals in the environment, and music as well as other types of sound accompaniment.

Children should develop an awareness of rhythm through dance. Opportunities to experiment with basic locomotor and non-locomotor movements, making combinations of these movements, action songs, singing games, and traditional dance steps are essential components of a quality dance program for children.

Fitness

Children should be introduced to active lifestyles and encouraged to exercise through play. Contemporary technology, including television, computers, and automated toys, often places children in an environment which deprives them of sufficient vigorous movement experiences. Adults as parents and/or teachers should actively

encourage children to engage in physical activity; sending children out for recess is not enough.

Patterns of exercise balanced with good nutrition and the components of health-related fitness should be presented to young children in terms they understand. Children should be engaged in the discussion of fitness concepts and simple activities in ways that are enjoyable and successful for them. Awareness of child development factors such as attention span, motivation, muscular strength, and endurance should be evidenced by changes of activity and short vigorous periods of exercise followed by brief periods of rest to allow for recovery.

Aquatics

Aquatic experiences are desirable for children if qualified staff and suitable facilities are available. Private, school, or community pools, hot tubs, lakes, rivers, and oceanfronts all provide children opportunities to be introduced to an aquatic environment. Aquatic experiences should include water play to overcome fear of the water, water safety to learn routines of safe behavior around water, and swimming instruction to learn the basics of flotation and stroke technique.

Summary

Movement is the learning of young children. Through movement and play experiences young children learn about themselves and their world. The educational curriculum of preschool children should include experiences in games, gymnastics, and dance. Perceptual-motor development and basic movement skills should serve as the base for experiences in games, gymnastics, and dance. Fitness concepts and the importance of a healthy lifestyle should be introduced to children at an early age. Instructional movement and play should be included daily in the planned educational curriculum of young children.

For more information contact:
COPEC/NASPE
American Alliance for Health, Physical Education,
Recreation and Dance
1900 Association Drive
Reston, Virginia 22091
703-476-3400

*This position paper was developed as a service to the profession and may be reprinted.

ISBN 0-88314-449-2

Sponsored by the Commission on Children's Dance (COCD) of the National Dance Association (NDA) and the Council on Physical Education for Children (COPEC) of the National Association for Sport and Physical Education (NASPE)

Associations of the American Alliance for Health, Physical Education, Recreation, and Dance

270